GEOGRAPHY OF THE

DOMINION OF CANADA

AND ATLAS OF WESTERN CANADA

SHOWING MAPS OF THE PROVINCES OF

ONTARIO, QUEBEC, NEW BRUNSWICK, NOVA SCOTIA, PRINCE EDWARD ISLAND,

MANITOBA, BRITISH COLUMBIA

AND DISTRICTS OF

ASSINIBOIA, ALBERTA, SASKATCHEWAN

THE DOMINION OF CANADA, NORTH AMERICA AND THE WORLD

DAVID LAIRD, MINISTER OF THE INTERIOR, OTTAWA, CANADA

INFORMATION AND ADVICE

CAN BE FREELY OBTAINED FROM THE FOLLOWING

JAMES A. SMART
Deputy Minister of the Interior, OTTAWA, CANADA

W. D. SCOTT
Superintendent of Immigration, OTTAWA, CANADA

J. OBED SMITH
Commissioner of Immigration, WINNIPEG, MANITOBA

UNITED STATES AGENTS

M. V. McINNES, No. 6, Avenue Theatre Block, Detroit, Michigan.
JAMES GRIEVE, Auditorium Building, Spokane, Washington.
J. S. CRAWFORD, 214 W. Ninth Street, Kansas City, Missouri.
E. T. HOLMES, 315 Jackson Street, St. Paul, Minnesota.
T. O. CURRIE, Room 12 B, Callahan Building, Milwaukee, Wisconsin.
C. J. BROUGHTON, 430 Quincy Building, Chicago, Illinois.
W. V. BENNETT, 801 New York Life Building, Omaha, Nebraska.
W. H. ROGERS, Box 116, Watertown, South Dakota.
C. PILLING, Clifford Block, Grand Forks, North Dakota.
J. C. DUNCAN, Room 6, [illegible] g, Indianapolis, Indiana.
H. M. WILL [illegible], Room [illegible] Toledo, Ohio.
C. O. SWANSTROM, Scandinavian [illegible]t, 315 Jackson Street, St. Paul, Minnesota
C. A. LAURIER, Sault Ste. Marie, Michigan.
BENJ. DAVIES, Dana Block, Great Falls, Montana.
R. A. BURRISS, Port Arthur, Ontario, Canada.

DOMINION LAND AGENCIES

Hereunder is a list of the different local agencies, with the names of the places at which the land offices are situated, and the name of the agent at each place:

DISTRICT	NAME OF AGENT	POST-OFFICE ADDRESS
Alameda	R. C. Kelley	Alameda, Assiniboia
Battleford	R. F. Chisholm	Battleford, Saskatchewan
Brandon	L. J. Clement	Brandon, Manitoba
Calgary	J. R. Sutherland	Calgary, Alberta
Dauphin	F. K. Herchmer	Dauphin, Manitoba
Edmonton	A. G. Harrison	Edmonton, Alberta
Kamloops	Jas. Bannerman	Kamloops, British Columbia
Lethbridge	A. J. Fraser	Lethbridge, Alberta
Minnedosa	John Flesher	Minnedosa, Manitoba
New Westminster	John McKenzie	New Westminster, British Columbia
Prince Albert	J. W. Hannon	Prince Albert, Alberta
Red Deer	W. H. Cottingham	Red Deer, Alberta
Regina	D. S. McCannel	Regina, Assiniboia
Winnipeg	E. Stephenson	Winnipeg, Manitoba
Yorkton	John McTaggart	Yorkton, Assiniboia

Compliments of C. F. Roland

GEOGRAPHY

OF THE

Dominion of Canada

AND

ATLAS OF WESTERN CANADA

SETTING FORTH, FOR USE IN SCHOOLS AND FOR THE GUIDANCE OF INTENDING SETTLERS, AN ACCOUNT OF ITS RESOURCES AND DEVELOPMENT

WITH MAPS OF

ONTARIO, QUEBEC, AND THE MARITIME PROVINCES, MANITOBA, BRITISH COLUMBIA, ASSINIBOIA, ALBERTA, AND SASKATCHEWAN

BESIDES

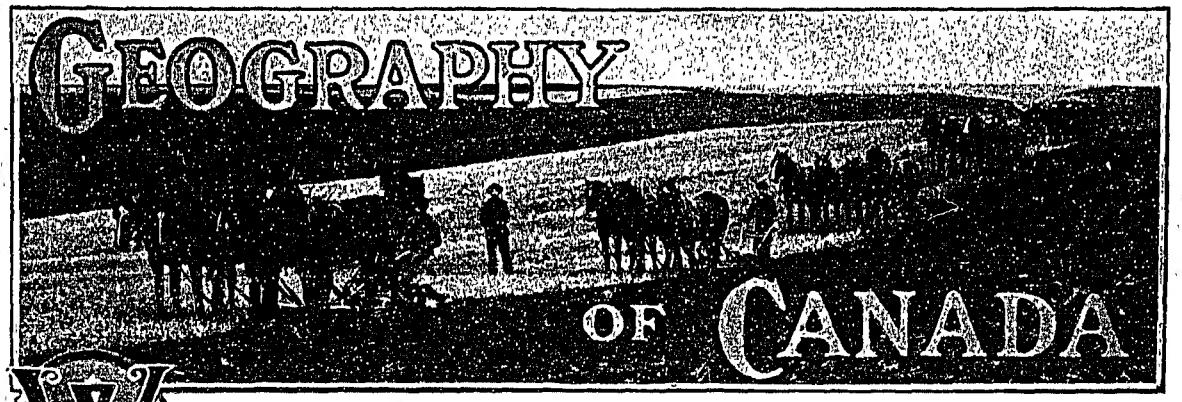
GENERAL MAPS AND NUMEROUS DIAGRAMS

CONTENTS

ISSUED BY DIRECTION OF

HON. CLIFFORD SIFTON, MINISTER OF THE INTERIOR

OTTAWA, CANADA



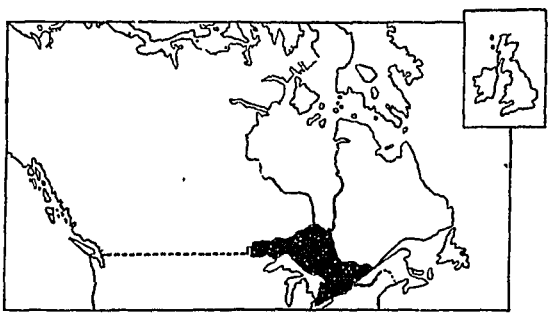
WE SPEAK of an "Old World" and of a "New World." Across the Atlantic Ocean to the west lies the "New World." Why do we give it this name? Because to our forefathers, the American continents, when they were discovered a little over 400 years ago, actually were a new world. These continents of North and South America, with the waters surrounding, make up the Western Hemisphere, the Dominion of Canada occupying the northern half of North America.

There is another reason: In the "Old World" conditions are more stationary. In Canada agriculture and industry are expanding. Every year new land is broken and tilled; the face of the country is changing; new homes are founded; new churches built. As fast as roads and railways open up a new section of country, settlers pour in to take up land. In the towns and cities the various industries are increasing, both in extent and in number, while the expansion of exports and imports proves that this is Canada's "growing time." All these conditions mean that there are here fresh opportunities for many classes of people. Thus Canada is in fact a new country, and one of the most important parts of the "New World."

SIZE OF CANADA.

It has been said that Canada occupies the northern half of North America. This is correct, except that the northwestern portion—the territory of Alaska—belongs to the United States. On the Atlantic side, the large island of Newfoundland, a British colony, will in all probability unite with Canada before many years. With the exception of Alaska, Newfoundland and the Danish colony of Greenland, the Dominion of Canada includes the whole of the North American continent north of the United States. The southern boundary is a line drawn along the 49th parallel of latitude on the west, the 45th parallel of latitude on the east, and the Great Lakes in the centre.

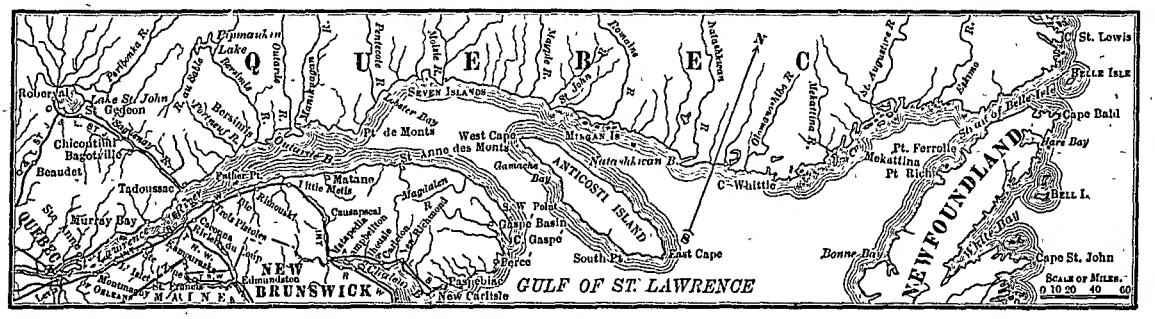
This means that Canada has an area of 3,750,000 square miles, that it is almost as large as Europe, and nearly twice the size of India. In fact, the Dominion makes up one-third of the British Empire. It stretches from the Atlantic to the Pacific, and is therefore almost 3,000 miles wide, with an extent, from south to north, of upwards of 1,500 miles. Draw a map of Canada and place England in one part of it, and the proportion will be as in the following diagram:

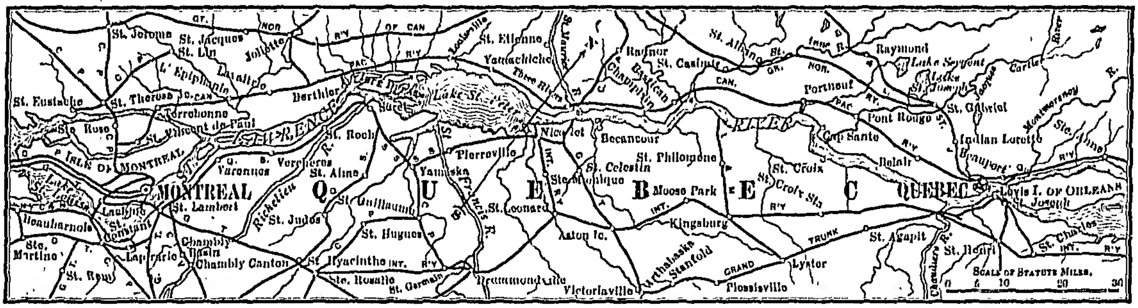


COMPARATIVE AREA.

Country.	Sq. Miles	Population	Persons to Sq. Mile
Canada	3,745,574	†5,456,931	1.5
United States	*3,739,934	85,431,631	21
Australasia	3,077,377	4,880,852	1.6
India	1,766,642	294,361,056	170
Great Britain and Ireland	121,371	41,605,220	343
England and Wales	58,231	32,526,075	558
Scotland	29,820	4,472,000	150

*This includes Alaska, 590,884 square miles; Hawaii, 6,449 square miles, and the Philippine Islands, 119,542 square miles.
†Estimated, 1903.





AREA AND POPULATION.

Provinces and Territories of Canada	Capital and its Population	Area in Square Miles			Population, 1901
		Land	Water	Total	
Dominion of Canada......	Ottawa...63,000	......	.....	......	....
Nova Scotia....	Halifax . 41,000	21,068	360	21,428	459,574
New Brunswick	Fredericton7,000	27,911	74	27,985	331,120
Prince Edward Island..	Charlottetown 12,500	2,184	......	2,184	103,259
Quebec	Quebec. 70,000	341,756	10,117	351,873	1,648,898
Ontario	Toronto..225,000	220,508	40,354	260,862	2,182,947
Manitoba	Winnipeg.60,000	64,327	9,405	73,732	255,211
Assiniboia	....	88,279	600	88,879	67,385
Alberta........	Regina.........	101,521	362	101,883	65,876
Saskatchewan ..	....	103,846	3,772	107,618	25,679
Athabaska ..	....	243,160	8,805	251,965	6,615
British Columbia	Victoria .21,000	370,191	2,439	372,630	178,657
Yukon	Dawson .. 9,000	196,327	649	196,976	27,219
Mackenzie......	....	532,635	29,547	562,182	5,216
Keewatin	....	456,997	13,419	470,416	....
Ungava........	....	349,109	5,852	354,961	5,113
Franklin......	... ...	500,000	. ...	500,000	* 8,546
Total......	....				5,371,315

* Keewatin and Franklin.

II.

History of Canada.

The British were not the first people to reach Canada. Nine hundred years ago (1000 A. D.), Leif Ericson, a Norwegian, discovered Newfoundland and Nova Scotia. Five hundred years after this (1497) Henry VII sent John Cabot to find out something more about this continent, which Columbus, five years before, had discovered anew.

CANADA AT FIRST A FRENCH COLONY.

A few years later (1534 and 1535) the French King, Francis I, sent out Jacques Cartier on a voyage of discovery. Cartier sailed up the great River St. Lawrence — the gateway of Canada — as far as the Indian village Stadacona, where now stands the picturesque city of Quebec. In the following year he returned and sailed up as far as the site of what is now Montreal. So he was the real discoverer of Canada. Sixty years later the great French explorer, Champlain, continued the work, penetrated into the interior, carried on trade with the Indians, and made Canada a French colony.

At this early time the name Canada, which in the Indian tongue means a village, denoted vaguely only the country along the north shore of the River St. Lawrence from Tadoussac (River Saguenay) to some distance above Quebec. For many years the colony was under the control of trading companies, but in 1663 the King of France began to send out officials to govern the colony in his own name.

CANADA BECOMES BRITISH.

During all this time a great many British people had been settling on the Atlantic seaboard to the south of Canada. This was a period when Great Britain and France were frequently at war, and the French and British colonies in America kept up

A Bit of Landscape in the Ranching District of Western Canada.

Harvesting in Western Canada.

the struggle. In 1713 what is now the mainland of Nova Scotia was ceded to Great Britain. Finally the British sent over Wolfe with a strong force, and in 1759 captured Quebec. Four years later, by the Treaty of Paris, the French king, Louis XIV, transferred all Canada to Great Britain. At the taking of Quebec, both Montcalm, the French general, and Wolfe fell.

Ever since this time Canada has remained loyal to the British crown. About ten years after the Treaty of Paris the British colonies on the Atlantic seaboard rebelled and formed the United States of America.

When the motherland acknowledged the independence of these colonies about 25,000 loyal British subjects moved over into Canada to live beneath the folds of the Union Jack.

CONFEDERATION.

In 1867, when there were three and one-half million people settled in Canada, the four Provinces now known as Ontario, Quebec, New Brunswick, and Nova Scotia united to form a confederation which is called the Dominion of Canada. It was also provided that other portions of British North America might unite with Canada. The Dominion adopted the same form of government as exists in the motherland. There is a Governor-General appointed by the King to represent him, two Houses of Parliament, and a Cabinet. As each Province has a Legislature of its own to manage its local affairs, it is just as if England, Scotland, Wales, and Ireland had separate Parliaments, in addition to that at Westminster.

During the six years, 1867-73, other portions of British North America, except Newfoundland, became part of the Dominion. Canada has thus become really a "daughter nation" of Great Britain. The motherland leaves her free to manage all her own local affairs.

HISTORICAL SUMMARY.

Canada visited by Cabot, 1497; Jacques Cartier sails up St. Lawrence, 1535; Port Royal (now Annapolis, Nova Scotia) founded, 1605; Quebec founded by Champlain, 1608. Royal French Government established, 1663. Acadia (Nova Scotia, except Cape Breton) becomes British, 1713 (Treaty of Utrecht); Halifax founded by British, 1749; Canada becomes British, 1763.

Formation of the Dominion of Canada, 1867.

Territorial rights of Hudson's Bay Company purchased, 1869; part of Northwest Territory formed into Province of Manitoba, which enters Confederation, 1870.

British Columbia joins the Dominion on condition that a railway be built across the continent, 1871; Prince Edward Island becomes part of the Dominion, 1873.

District of Keewatin created, 1876.

The four Districts of Alberta, Assiniboia, Athabaska, and Saskatchewan formed from southern portion of Northwest Territories, 1882.

Canadian Pacific Railway completed, 1885.

Districts of Mackenzie, Ungava, and Franklin created, 1895.

Territory of Yukon created, 1898.

III.

Population of Canada.

Canada has now a population of nearly six millions. Two and one-fourth millions live in Ontario; one and three-fourths millions in Quebec; nearly a million in the Maritime Provinces (New Brunswick, Nova Scotia, and Prince Edward Island); half a million in Manitoba and the Territories; and nearly two hundred thousand in British Columbia. Canada has more than one-half the white population of all the British colonies.

SOME IMPORTANT CITIES OF CANADA.

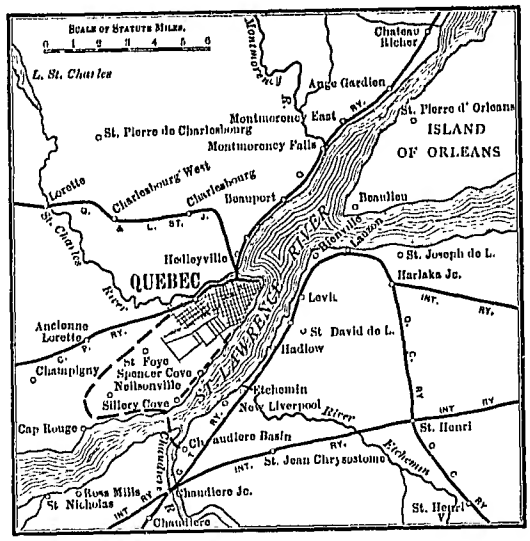
Province.	City.	Population.
Quebec	Montreal (including suburbs)	325,000
"	Quebec	70,000
"	Hull	14,000
"	Sherbrooke	12,000
"	Three Rivers	10,000
Nova Scotia	Halifax	41,000
" "	Sydney	10,000
New Brunswick	St. John	41,000
" "	Fredericton	7,500
Prince Edward Island	Charlottetown	12,500
Ontario	Toronto (including suburbs)	225,000
"	Ottawa	63,000
"	Hamilton	55,000
"	London	39,000
"	Brantford	17,000
"	Kingston	18,000
"	Peterborough	14,000
"	Guelph	12,000
"	St. Thomas	11,500
Manitoba and Territories	Winnipeg	60,000
" " "	Brandon	7,000
" " "	Portage la Prairie	5,000
" " "	Calgary	6,000
" " "	Regina	3,000
" " "	Edmonton	5,000
" " "	Dawson	9,000
British Columbia	Vancouver	27,000
" "	Victoria	21,000
" "	New Westminster	6,500

Sixty-two towns had in 1901 a population of over 5,000

Eighty-seven per cent of the people living in Canada were born there; and as many as 95 per cent have been born in some part of the empire. At the beginning of the twentieth century only 5 per cent were foreigners by birth, and 55 per cent of these were naturalized. Most of those who live in the Province of Quebec are descendants of the early French settlers. They form 30 per cent of the whole population of Canada.

FULL RELIGIOUS LIBERTY.

In Canada all religious denominations are on an equality, and complete religious liberty prevails. Canadians of French descent are almost all members of the Roman Catholic Church, which has, on this account, more communicants than any other religious denomination in Canada. Among Canadians not of French descent, the Methodists are the strongest in numbers; the Presbyterians come next, the Roman Catholics third, the Church of England fourth, and the Baptists fifth.



In Manitoba and the Territories, owing to the large number of Scotch settlers, the Presbyterians are most numerous, constituting 21 per cent of the population, the Methodists ranking next with nearly 17 per cent, and the Church of England third with 16 per cent; 83 per cent of the population in the West is Protestant.

There are no church rates, or taxes, except in Quebec, where the Roman Catholic Church has a qualified right in this respect over its own members.

NATIVITY OF CANADIANS.

Born in	No.
Canada	4,671,815
England	201,285
Ireland	101,629
Scotland	83,631
Newfoundland	12,432
Other British Possessions	6,906
United States	127,899
Germany	27,300
Russia and Poland	31 231
China	17,043
Scandinavia	12,331
France	7,914
Italy, Spain, and Portugal	7,124
Other Countries	62,745

DECLARED SETTLERS ENTERING CANADA.

Country of Origin.	1902.	1903.
United States	26,388	49,473
England and Wales	13,095	32,510
Scotland	2,853	7,046
Ireland	1,311	2,236
Galicia	6,550	10,141
Russia and Finland	3,759	7,277
Scandinavia	2,451	5,448
Hungary	1,048	2,156
Germany	1,048	1,887
France and Belgium	654	1,240
Austria	320	798
Other Countries	7,902	8,152
Total	67,379	128,364

The number of declared settlers entering Canada in 1899 was 44,543; in one-half of 1900, 23,895; and in the fiscal year 1900-1, 49,149.

MANY NEW SETTLERS.

During the past few years thousands of new settlers have been coming into the country, some to establish industries, but the great majority to take up land and become farmers. During the twelve months ending June 30, 1903, there were 128,364 new settlers; of these 48,408 came from the United States, and 41,792 from Great Britain and her colonies. Bearing in mind how large Canada is, it is manifest that the country can give homes to many times these numbers. There is room for a hundred million inhabitants, and the resources are so great that no one can say how large the population will be fifty years hence.

IV.

Physical Features.

North America has not always been so large as it is to-day. Ages ago there was only a "U" shaped range of mountains, running around what is now the great Hudson Bay. This ancient portion of North America is now called the "Laurentian Highland," and consists of the hilly territory extending from Labrador down to the St. Lawrence River, then northwest to the Arctic Ocean.

THE APPALACHIANS AND THE CORDILLERA.

Thousands of years afterward a great upheaval pushed up other mountains directly south, and still others away to the west.

Those on the south are now called the "Appalachians." They give form to the east coast of the United States, from which they are at no point far distant. In Canada they jut out as a large peninsula, which forms what is known as Gaspé.

The mountainous region on the west has been named the "Cordillera." It is more than two thousand miles west of the Appalachians, and includes the greater part of British Columbia and the whole of Yukon. These mountains occupy a very large area and are made up of several parallel ranges. In British Columbia they are over four hundred miles wide, or twice as broad as the widest part of England. The Coast Range runs along the coast; the Rockies, properly so called, lie on the east; between them are the Selkirks, Gold, Cariboo, Cassiar, and other ranges.

Away to the north, about nine hundred miles from the United States and Canada boundary, is a great area drained by the mighty Yukon River. Within this area is found the Yukon Territory with its far-famed gold fields. The Klondike Valley, of which so much has been written during the last few years, lies in its centre. West of Yukon is the United States territory of Alaska.

PHYSICAL DIVISIONS OF CANADA.

Canada may be conveniently divided into five sections: (1) The rugged Cordillera in the west with its magnificent scenery and wealth of minerals; (2) the Laurentian Highland in the east, made up of low, rounded hills, with innumerable lakes and rivers, rich also in minerals; (3) the Central Plain between; (4) south of the Highland, the great lowlands of Southern Ontario and Southern Quebec, with the Great Lakes and the Ottawa and St. Lawrence rivers draining the interior into the Atlantic Ocean. Finally, (5) on the Atlantic Coast is the great peninsula which includes the Maritime Provinces and Gaspé. Between it and the Laurentian Hills flows the River St. Lawrence.

LAKES AND RIVERS.

A relief map of Canada would show that from the Rockies, the southern part of the Dominion slopes northeastward toward the Laurentian Highland. Thus the largest rivers in the south flow eastward. For instance, the Saskatchewan River, with its north and south branches, flows east into Lake Winnipeg, then northward by the Nelson River into Hudson Bay. But the

most important series of lakes and rivers flowing east is the chain of the Great Lakes, their connecting rivers, and the mighty St. Lawrence and its tributaries. This chain is called the St. Lawrence River System.

On the north, the great Central Plain has a northerly slope. Thus the Mackenzie River, with its tributaries, the Slave, Liard, Athabaska, and Peace rivers, empties into the Arctic Ocean. This river, exclusive of its tributaries, is 2,100 miles long. The Yukon River in the Yukon Territory also flows northward, passing through Alaska into Behring Strait, after a course of 2,300 miles.

In the "Maritime Provinces" of Canada the lakes and rivers are comparatively small. In Cape Breton Island, east of the mainland of Nova Scotia, are the beautiful Bras d'Or lakes, a favorite resort of tourists. In New Brunswick the River St. John, at the mouth of which is the port of St. John, empties into the Bay of Fundy, after draining an area of 26,000 square miles.

DRAINAGE SYSTEM OF CANADA.

The great extent of inland lakes and streams of fresh water is one of the special features of Canadian geography. Canadians are beginning to use these streams with their waterfalls and rapids for industrial purposes.

CHAIN OF GREAT LAKES.

Lakes.	Length miles.	Breadth miles.	Area sq. miles.	Elevation above Sea, feet.
Lake of the Woods				1,057
Lake Superior	354	162	31,800	602
Lake Michigan	316	118	22,400	581
Lake Huron	207	101	23,200	581
Lake St. Clair	26	24	445	575
Lake Erie	239	59	10,000	572
Lake Ontario	193	53	7,260	246

From the western end of Lake Superior to the mouth of the St. Lawrence is one continuous navigable waterway, 2,384 miles long.

The St. Lawrence River system consists of the following:

St. Lawrence River—755 miles long.

Tributaries of St. Lawrence.	Lakes drained.
Saguenay—100 miles long	St. John
St. Maurice—400 miles long	
Ottawa—750 miles long	Timiskaming
Richelieu—75 miles long	Champlain
French	Nipissing
Mississagi	
Nipigon	Nipigon
Pigeon	Arrow

The following rivers drain into Hudson Bay:

	Lakes drained
East Main	
Great Whale	
Big	
Rupert	Mistassini
Nottaway	
Moose, with its tributaries, Abitibi, Mattagami, and Missinabie	Abitibi

Rivers (continued)	Lakes drained
Albany	St. Joseph
Winisk, Severn	
Nelson with its continuation, Saskatchewan and North Saskatchewan, and tributaries	Winnipeg
English	Seul
Winnipeg	Lake of the Woods
Red, Assiniboine	
Dauphin	Winnipegosis and Manitoba
South Saskatchewan, Bow, Belly, Red Deer	
Churchill	Reindeer
Dubawnt	Dubawnt

The following rivers drain into the Arctic Ocean:

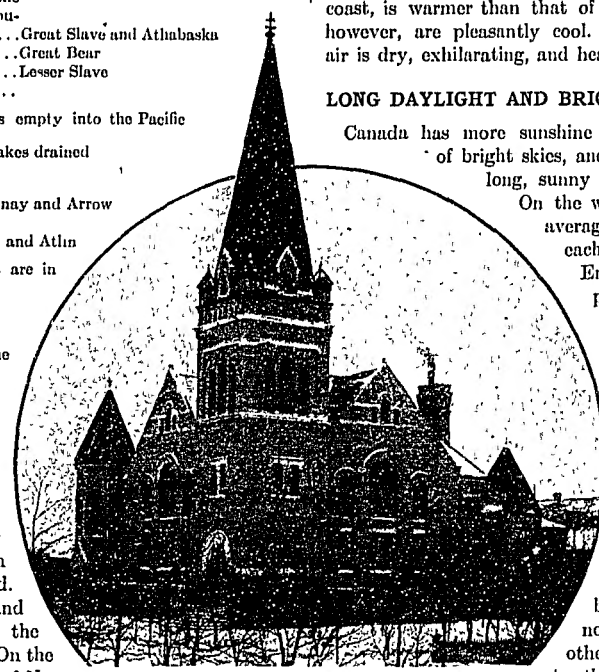
	Lakes drained
Backs, Coppermine	
Mackenzie, with its continuation, the Slave and Peace, and tributaries	Great Slave and Athabaska
Bear	Great Bear
Athabaska	Lesser Slave
Liard	

The following important rivers empty into the Pacific Ocean:

	Lakes drained
Fraser, Skeena, Stikine	
Columbia, with its tributary, the Kootenay	Kootenay and Arrow
Yukon, with its tributaries, Pelly and Lowes	Teslin and Atlin

The following important rivers are in New Brunswick:
St. John—500 miles long.
Miramichi—220 miles long.

In Cape Breton Island—The Bras d'Or Lakes.



A Church at Brandon, Manitoba.

ISLANDS.

The northern and western coasts of Canada are skirted by clusters of islands. Those on the north are of little use at present except for whaling stations, as, for example, Baffin Land and Southampton Island. On the west, Vancouver and Queen Charlotte islands are the largest and most important. On the east, besides the island colony of Newfoundland there are Cape Breton, Prince Edward, Magdalen, and Anticosti islands. Directly south of Newfoundland are the two little islands of St. Pierre and Miquelon, which belong to France. They were left in the hands of that power in 1763 in order to allow French fishermen to land and dry their nets.

In Lake Huron is the large island of Manitoulin, and near by are the so-called Thirty Thousand Islands of Georgian Bay. In the River St. Lawrence, just below Lake Ontario, are the Thousand Islands, justly celebrated for their scenery.

GULFS AND BAYS.

Hudson Bay on the north is really a great inland sea with James Bay at its southern end. It is 1,250 miles in its greatest length and 550 miles in greatest breadth. Its water is clear and salt. On the west of Canada is the Gulf of Georgia, between Vancouver Island and the mainland. On the east is the pear-shaped Gulf of St. Lawrence, five hundred miles long. The Bay of Fundy lies between Nova Scotia and New Brunswick. Off Lake Huron, in Ontario, is the large Georgian Bay, which is important for inland shipping.

V.

Climate of Canada.

The most southerly part of the Province of Ontario is as far south as Rome, while the most northerly part of Manitoba lies opposite Liverpool. Just as Rome and Liverpool, lying in different latitudes, have diversity of climate, so in Canada, it is clear that there will be several climates. Even some of the provinces are so large that the same rule applies.

In the provinces near the ocean, both on the western and on the eastern side, the climate is mild and moist; the western coast being milder and having more rain than the Atlantic. The summers are warm. The summer temperature (June, July, and August) of all Canada, other than the northeast and north coast, is warmer than that of England. The summer nights, however, are pleasantly cool. The winters are cold, but the air is dry, exhilarating, and healthful.

LONG DAYLIGHT AND BRIGHT SKIES.

Canada has more sunshine than Europe. It is a country of bright skies, and when summer comes, with its long, sunny days, the grains ripen quickly. On the western prairie there are, on the average, two hours more of sunlight each day during summer than in England. In England, for example, there is sunshine only for one quarter to a little over one-third of the time; England's highest average is Canada's lowest.

MODIFYING INFLUENCES.

British Columbia has the mildest climate in the Dominion. This is because of the warm current of water flowing across the Pacific from Japan. The Province is protected also from the east winds by the Rocky Mountains. The north and northeast coasts, on the other hand, are the coldest. Farther to the south, from the Atlantic to Manitoba, it is mild and moist. One of the great influences on the climate of this part of Canada is the immense area of inland waters. In the western territories there is less rain than in the east, but as it rains very little in winter, most of the precipitation being in spring and autumn, when needed for agricultural purposes, the difference is not so marked after all. The coolness of the prairie night, after the hot summer day, causes heavy dews. These, to a certain extent, protect the grain from the effects of drouth, even in the driest seasons. They also produce a rich growth of prairie grass, making the climate peculiarly favourable on this last account for the stock farmer. In Alberta the warm, dry Chinook winds from the Pacific greatly modify the cold of winter by raising the temperature to 50° and 60° F., causing snow to disappear as if by magic.

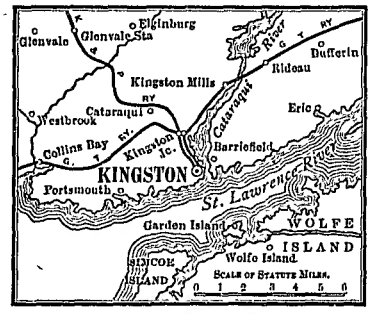
SEASONS IN THE WEST.

Summer in the West comes toward the end of May. Then the farmer, whose seed has already been sown, breaks fresh ground or works over the fallow land. In August the harvests must be gathered in. The autumn is one of the most delightful seasons, extending into November. The farmer now does his

ploughing against the spring thaw (which comes in April), markets his grain, and enjoys a little well-earned leisure. In April it is spring, the alders and willows in the valleys are in bloom, and the seeding must be done as soon as the sun has softened the surface of the soil. Almost before the farmer has completed his preparations it is again summer, and soon the hum of the grain thresher is heard in the land.

DRY ATMOSPHERE.

During the winter warm woolen clothing is necessary. Because of the dryness of the inland climate the cold is much less noticeable than a stranger might expect. Less snow falls on the prairies than in the East, and on account of the dryness of the air, it brushes off one's coat like dust.



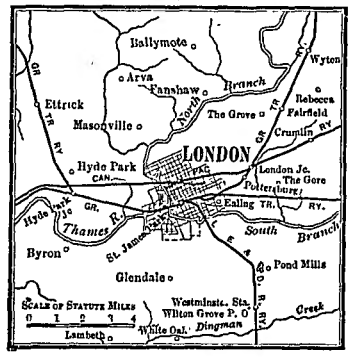
Everywhere the appearance of snow is hailed as seasonable and beneficial. Sleighing parties of pleasure are arranged for the period of full moon, and the sound of the sleigh bells is a merry one. The snow protects the autumn-sown wheat from the frost, aids the lumberman in drawing his timber from the forest, and also the farmer in hauling his produce to market, and so contributes alike to business and to pleasure.

The climate and soil of Canada are such that the country produces a great variety of grains and fruits.

VI.

Agriculture in Canada.

In Canada, while manufactures are very important, agriculture gives employment to a larger number of people than any other industry. In the early years of Canada's history, farming was carried on only in the southeastern portion of British North America—Ontario, Quebec, and what are now the Maritime Provinces. Gradually, however, the country farther west and northwest was opened up by roads and railways, the forests were cut away, and the agricultural area was widely extended. A few years ago (1885), when the Canadian Pacific Railway was completed, practically the whole of the northwestern portion of the Dominion was thrown open to settlement. No fewer than 32,682 homesteads have been taken up in Manitoba and the Northwest Territories during the year 1903.



RELIGIONS OF THE PEOPLE—By Provinces.

Denomination	Canada		Ontario		Quebec		Nova Scotia		New Brunswick		P. E. Island		Manitoba		Brit. Columbia		Territories	
	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891
Roman Catholics	2,229,600	1,992,017	390,304	358,300	1,429,260	1,291,709	129,578	122,452	125,698	115,961	45,796	47,837	35,672	20,571	33,639	20,843	39,653	14,344
Church of England	680,620	646,059	367,937	385,999	81,563	75,472	66,107	64,410	41,767	43,095	5,976	6,646	44,922	30,852	40,689	23,619	31,659	15,966
Presbyterians	842,442	755,326	477,386	453,147	58,013	52,673	106,381	108,952	39,496	45,639	30,750	33,072	65,348	39,001	34,081	15,234	30,937	12,558
Methodists	916,886	847,765	666,388	654,033	42,014	39,544	57,490	54,195	35,973	35,504	13,402	13,596	49,936	28,437	25,047	14,298	26,636	8,158
Baptists	316,477	302,565	116,320	104,838	8,480	7,981	83,233	83,108	80,874	79,634	5,905	6,261	9,166	16,107	6,500	3,090	5,999	1,546
Tunkers	1,528	1,274	1,499	1,209	3	10	8	14	.....	15	.....	4	2	5	6	8	10	9
Brethren	8,014	11,637	6,416	9,343	587	1,129	142	242	4	234	.....	.....	467	389	164	166	234	134
Lutherans	92,524	63,982	48,052	45,029	1,642	1,385	6,572	5,882	196	377	8	3	16,542	6,545	5,335	2,083	14,177	2,678
Congregationalists	28,293	28,157	15,289	16,879	5,173	4,296	2,938	3,112	1,040	1,036	3	11	1,884	1,815	1,198	775	768	233
Disciples	14,900	12,763	10,154	9,106	17	20	1,412	1,728	1,040	1,003	810	531	470	261	99	62	301	52
Adventists	8,058	6,354	1,226	447	3,079	3,364	1,494	1,651	1,124	715	10	22	519	32	254	109	352	14
Unitarians	1,934	1,777	735	776	561	554	55	115	145	147	12	10	221	74	133	79	72	22
Protestants	11,612	12,253	2,800	2,938	5,211	2,342	335	47	104	22	21	9	646	1,874	844	286	1,651	4,735
Salvation Army	10,308	13,949	6,479	10,320	292	297	1,251	1,377	606	993	116	180	745	399	570	298	249	85
Quakers	4,100	4,650	3,648	4,350	59	38	28	41	5	17	1	8	124	124	130	38	105	34
Jews	16,401	6,414	5,321	2,501	7,498	2,703	437	31	376	73	17	1	1,497	743	554	277	701	85
Others not specified	187,618	126,297	62,993	55,106	5,446	5,018	2,113	3,039	2,075	1,798	432	887	27,050	5,277	29,414	16,858	58,095	38,314

FREE FARMS.

It is difficult for those living where all land is occupied and sold only for a high price to understand that some of the best farming land on the continent of America is to be had almost for the asking, by anyone who wishes to cultivate it. The settlement of these lands is heartily encouraged by the Government, because a fertile soil and great natural resources are of no service unless people are there to cultivate and develop them. Of course, it is also important to get a good class of settlers.

Anyone who will cultivate the land in the West can get a farm of 160 acres free; while in Northern Ontario and Quebec he can procure one on nominal terms, in some instances without any cost. He can also buy land from railway and other corporations at a low figure.

CANADIANS OWN THEIR OWN FARMS.

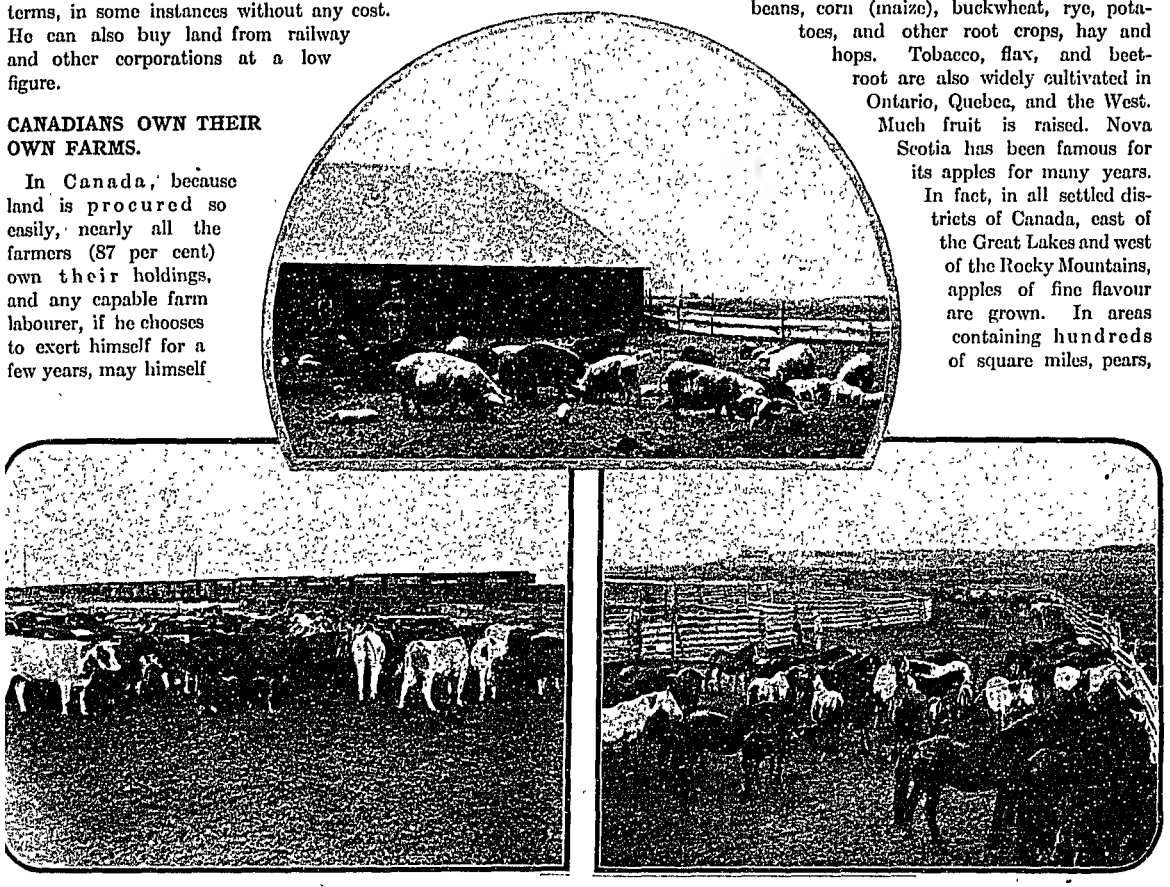
In Canada, because land is procured so easily, nearly all the farmers (87 per cent) own their holdings, and any capable farm labourer, if he chooses to exert himself for a few years, may himself become an owner. During the last few years the large harvests of the Canadian farmers have been attracting great attention in Europe and in the United States. Tens of thousands of settlers are pouring in every year to take up the new land, chiefly in the great West, while many go to Northern Ontario and Northern Quebec. Railway companies are extending the railways and planning new lines. It is estimated that the annual value of all farm crops and products in Canada is upwards of $363,000,000. The total value of farm property, lands, buildings, and farm implements is $1,500,000,000.

EXTENT OF FARMING COUNTRY.

The agricultural belt extends across the continent and forms a tract about 2,500 miles long and several hundred miles wide. The area now under cultivation amounts to 30,167,000 acres. There remains untouched an area vastly larger, and virgin land is still to be had in all the provinces, especially in the West. It is difficult, therefore, to assign a limit to Canada's agricultural possibilities.

The geographical position of the Dominion is advantageous to the farmers, and the splendid railway and steamship service facilitates shipment of grain to the European markets.

Wheat is not the only crop grown in the Dominion. Besides wheat there are oats, barley, pease, beans, corn (maize), buckwheat, rye, potatoes, and other root crops, hay and hops. Tobacco, flax, and beet-root are also widely cultivated in Ontario, Quebec, and the West. Much fruit is raised. Nova Scotia has been famous for its apples for many years. In fact, in all settled districts of Canada, east of the Great Lakes and west of the Rocky Mountains, apples of fine flavour are grown. In areas containing hundreds of square miles, pears, peaches, and grapes are grown in the open air. Small fruits, such as plums, cherries, strawberries, raspberries, currants, and gooseberries also grow plentifully. Apples and pears are the chief fruits exported, though within the last few years the railways and steamship lines have introduced cold storage, so that it is now possible to make shipments of other fruits to Europe.



Some of Western Canada's Moneymakers.

DAIRYING AND LIVE STOCK.

In Eastern Canada dairying receives a deal of attention. Many farmers grow grain only to feed cattle. In all the well-settled portions there are cheese and butter factories to which

almost every producer sends milk. In the West dairying has been carried on with considerable success for some time. Canada supplies the home consumption of butter and cheese and has a

surplus of 34,200,000 pounds of butter and 229,100,000 pounds of cheese to ship to the mother country every year.

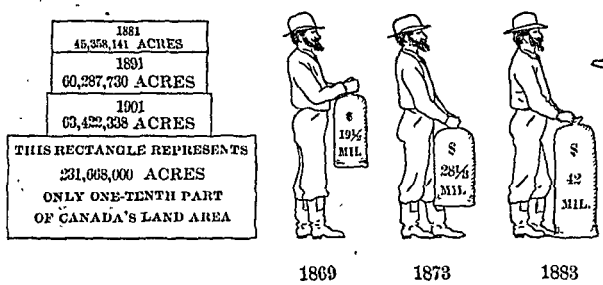
Stock farming is growing rapidly in the East, and in the West there are very many extensive horse and cattle ranches. Western farmers for many years devoted all their attention to wheat growing, but of late years have also engaged in stock raising. Canadian live stock has a high reputation. At the Chicago World's Fair in 1893, for example, Canadian cattle took 462 prizes out of 1,187 awarded.

In order to protect stock breeders from the introduction of disease among cattle, all stock imported into Canada is inspected by Government veterinarians.

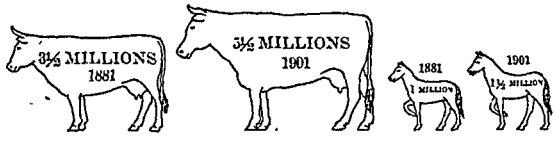
COMPARISONS OF GROWTH.

SOME FIGURES CONCERNING CANADIAN FARMS.

LAND AREA AND VALUE OF FARM EXPORTS.

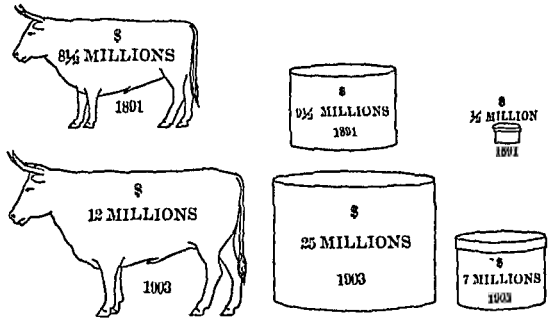


INCREASE OF LIVE STOCK



Since 1881 the number of cattle has grown from 3,500,000 to 5,500,000. The number of horses has grown in the same period from 1,000,000 to 1,500,000.

INCREASE IN CATTLE AND ANIMAL PRODUCTS EXPORTED.



YIELD OF 1902 HARVEST.*

		Wheat bushels	Oats bushels	Barley bushels	Potatoes bushels
Ontario	1902	26,081,693	106,431,439	21,800,602	12,042,250
Manitoba	"	53,077,267	34,478,160	11,848,422	3,459,325
N. W. Territories	"	13,956,850	10,661,295	870,417	1,277,793
New Brunswick	"	453,640	5,313,349	106,701	4,156,638
Nova Scotia	1900	248,476	2,347,598	181,085	4,394,413
British Columbia	"	368,419	1,441,566	73,790	956,126
P. E. Island	"	738,679	4,561,097	105,625	4,986,633
Quebec	"	1,968,203	33,536,677	2,535,597	17,135,739
		96,893,227	198,771,181	37,612,239	49,308,917

SOME FARM EXPORTS IN 1903.

Wheat and flour, bu.†	39,000,000
Barley, bu	947,012
Oats, bu	7,593,177
Pease, bu	1,144,754
Beans, bu	51,043
Rye, bu	470,419
Indian corn, bu	70,328
Buckwheat, bu	314,349
Other grains, bu	5,450
Oatmeal, bbls	144,836
Bran, cwt	351,641
Other breadstuffs, bbls	10,175
Cheese, lbs	229,100,000
Bacon, lbs	137,954,552
Butter, lbs	34,128,944
Apples, green, bbls	1,000,528
Apples, evaporated, lbs	7,795,360
Hay, tons	450,053
Eggs, doz	7,404,100
Cattle valued at	$11,342,637
Horses valued at	595,921
Sheep valued at	1,655,681
Value of exports of animals and animal products and of agricultural products in 1903	112,043,365

* Figures for 1900, in some cases, are the latest obtainable, but the total gives an approximation of annual yield.

† Flour computed at 4 bushels and 35 pounds of wheat to the barrel.

VII.

Agriculture in Manitoba and the Territories.

TRIP TO THE WHEAT FIELDS.

Reaching Manitoba and the Territories in the latter part of August, you realize the force of the designation, "the Granary of the Empire," the motto on the Canadian coronation arch in London. It is harvest time, and the wheat fields are like a sea of gold. This "Granary" extends east and west for 1,000 miles to the foot of the Rocky Mountains, and about five hundred miles from south to north. A sense of vastness grows upon you as you travel through this great country.

This wheat-growing area comprises the Province of Manitoba and the four Districts of Assiniboia, Saskatchewan, Alberta, and Athabaska. These territories contain 385,000,000 acres of land, of which upwards of 100,000,000 are estimated to be fit for cultivation.

Province or District	Population 1901	No. of farmers 1901	Total land area acres	Percentage of improved land under crop 1900	Average size of farm acres
Manitoba.....	255,211	32,495	41,169,008	69%	278
Assiniboia ...	67,385		56,498,546		
Saskatchewan.	25,079	23,008	60,460,869	53%	288
Alberta.....	65,876		64,973,212		
Athabaska....	6,615		155,622,904		

One of Winnipeg's Parks.

THE PRAIRIES OF WESTERN CANADA.

On most of the prairies there are no trees to be cleared away; thus the area under cultivation increases very rapidly. The settler with a gang plough and two yoke of oxen can break up a quarter section (160 acres) during five spring and summer months. He does this simply by turning a very thin sod with the plough, then backsetting and harrowing. This operation costs between $3.50 and $4.00 per acre, but sometimes a rougher and quicker system of breaking land is followed. The soil is an exceedingly rich, black mould, of varying depth, with clay beneath, which holds the moisture.

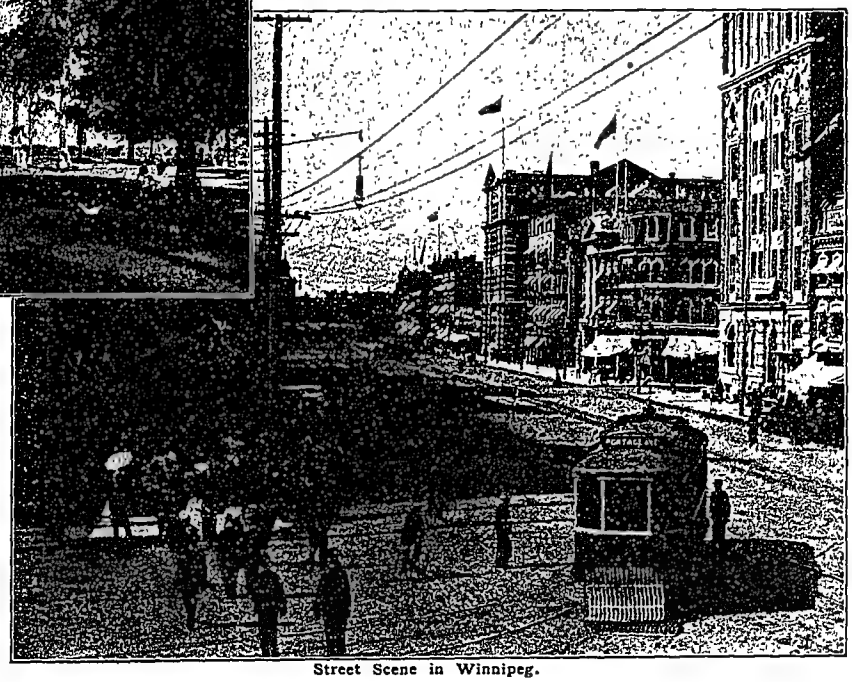
Most of this western country, especially the southern portion, is rolling, treeless prairie. These prairies are covered with coarse, rich grass growing in tufts, with shrubs and small trees scattered grove-like here and there over their surface, thus giving many portions a park-like appearance. In the northern sections and in the river valleys there are vast regions that are heavily wooded. Along the slope of the Rocky Mountains also this wooded condition exists. The land in the southwestern portion is now most suitable for grazing, but under irrigation, now being introduced on a large scale, develops wonderful fertility.

FARMS A MILE SQUARE.

The whole country is divided into blocks, each containing one square mile (640 acres). A block is called a section and is divided into four quarter sections. This quarter section is the unit for a single farm. In the West they do not speak of a farm as such, but of a quarter section, or half section, or a section.

Some farmers urge that a half section (320 acres) is a better size than a quarter section, in that it allows enough land for a man and his family to work, leaving a considerable portion to be summer fallowed. Many work their land year after year without summer fallowing, and find the crops satisfactory. The theory is that the frost of winter helps to preserve the soil by preventing the nitrates from being leached away.

The moment the crop is harvested the plough is turned on, so that with the earliest April warmth seeding may begin. Nowhere else does the first fortnight of spring count for so much. Farmers sow when barely an inch or two of ground is sufficiently thawed to allow the seed to be covered, and the hot sun forces on the grain with great rapidity.



Street Scene in Winnipeg.

THRESHING IN WESTERN CANADA.

In the West great threshing gangs, with their huge threshing machines, traverse the country from farm to farm. Many of the farmers find it necessary, owing to the size of the crops, to own their own machines. The men sleep in a large conveyance somewhat like a car, which is drawn by the traction engine that moves the threshing machine and supplies the motive power. As the hum of the threshing machine begins the scene is a lively one. Every man has his appointed place, and the stacks grow rapidly smaller as the pile of straw heaps up and the bags are filled with bright, clean grain. As soon as threshing is over, the farmer hauls his grain to the nearest railway station, where it is graded and stored in the elevators

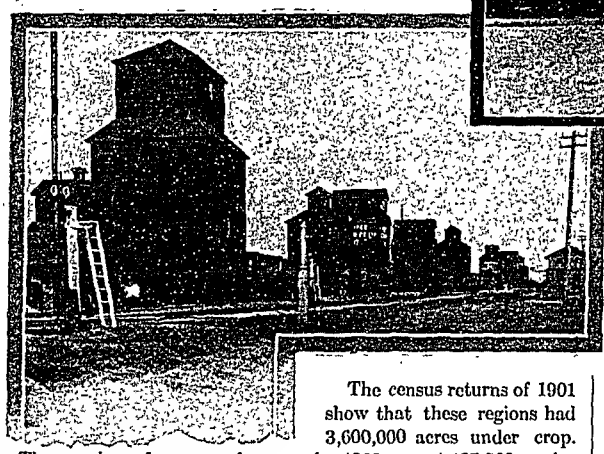
for shipment over the railway. Sometimes he prefers to hold his grain for a "rise" in the price, but this is a risky bit of speculation in which only those who are well established can indulge.

RESULTS FOR THE FARMER.

The average yield of wheat in the West during fourteen years has been 20 bushels per acre, the highest yearly average being nearly 28 bushels. A glance at the diagram (page 44) gives the best illustration of the results. In individual cases as high as 40 and 45 bushels per acre have been recorded. At the Government Experimental Farms, where more labor is expended on the land, the yield is much larger. The quality of the western wheat must also be taken into account. Tests made recently by three London bakers showed that this wheat has about 10 per cent more albuminoids than the best European brands; and that 100 pounds of Canadian flour make more bread of excellent quality than the same weight of any other flour imported into Great Britain.

To grow a bushel of wheat costs the western farmer about 35 cents. All he sells it for above this is clear gain. He is now receiving 75 cents, or a profit of 40 cents per bushel.

A recent estimate has been made of what we may expect Manitoba and the three southern territories to yield.



The census returns of 1901 show that these regions had 3,600,000 acres under crop. The number of acres under crop in 1903 was 4,687,583, an increase of over 30 per cent.

Assuming that the area of Manitoba and the three territories is 228,000,000 acres, and that, of this, 45,000,000 are available for wheat, oats, and barley, the calculation would result in showing that in twelve years the whole 45,000,000 acres would be taken up and the output at the present average per acre would be:

	Acres	Yield bushels
Wheat	29,700,000	750,000,000
Oats	11,250,000	528,000,000
Barley	4,050,000	141,750,000

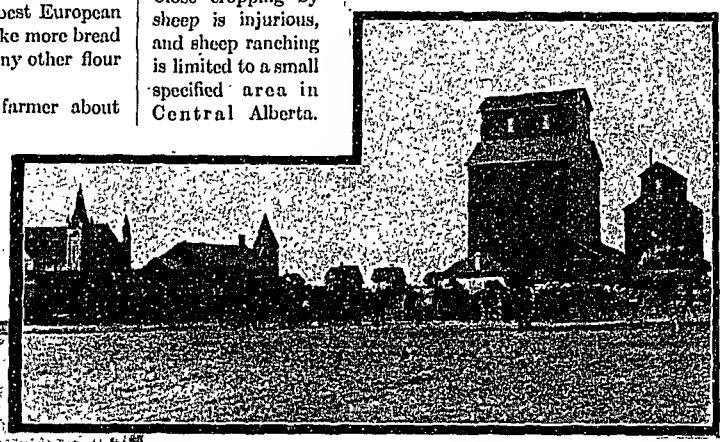
From the rate at which population is pouring into these regions it is safe to say that the 45,000,000 acres will be under the plough and yielding a harvest long before the expiration of the term of years mentioned.

By that time double the number of acres will be ready for the farmer, and still there will be 138,000,000 acres to be brought under the plough.

The demand for wheat in the United Kingdom over and above the normal production of that country is about 200,000,000 bushels. If the foregoing estimate is fulfilled, the Canadian West itself will be raising this quantity within a comparatively few years. And it must not be forgotten that this prophetic survey does not include Athabaska, with its fertile Peace River country.

RANCHING.

The ranching country of Canada is chiefly in Southern Alberta and Western Assiniboia. The ranches vary in size from 1,000 to 20,000 acres and over. They must always have a central supply of water for the use of the stock. This land is usually covered with the coarse, rich prairie grass, which makes good fodder both in summer and winter. It is peculiar inasmuch as it does not form into turf as in other countries, but grows more in tufts. Close cropping by sheep is injurious, and sheep ranching is limited to a small specified area in Central Alberta.



Where Western Canada's Grain is Handled.

Many of the ranches are owned by Englishmen who had considerable capital with which to begin, but the larger ones are for the most part operated by companies. During the past few years a large area has been taken up by settlers from the United States, who have moved their entire herds and flocks to these lands.

Cattle and horses are brânded with the stamp of their owner and then allowed to roam at large on the plains. They remain out all winter and can live ordinarily on the grass; but wild hay is stacked every summer for use when a thaw is followed by frost, as it is then difficult for the cattle to eat through the crusted snow.

Twice each year—in the spring and fall—takes place what is called a "round-up" of all the cattle in each district. Cowboys are sent out from the ranches, and after driving all the wandering cattle or horses into a central place, they go through the herd, "cutting out" the cattle of their own ranches with the young. As the means of identification, the brand is of the utmost importance, and the man who fails to respect it is severely punished. Cattle that have strayed in from other districts are sent to a single ranch and the various brands are advertised in the newspapers so that the owners may claim their cattle. Shipments are made to the mining districts of British Columbia, to Eastern Canada, the United States, and England.

GRAIN ELEVATORS.

The immense crops of the West must be stored up for gradual shipment to Europe. There are at present 1,003 elevators west of Lake Superior, with a total capacity of 40,778,000 bushels. To the east are others with a capacity of another 12,500,000

bushels, while several more are being built at Montreal and other places. The largest is the Canadian Pacific elevator at Fort William, on Lake Superior. It holds 3,200,000 bushels. These storehouses are called elevators because they raise the grain from the waggon before distributing it into the great bins.

MIXED FARMING.

Mixed farming includes the raising of grain, root crops, cattle and other stock, and dairying. Requiring more labor, it can develop only as the population increases. Mixed farming is being carried on in Manitoba, the Saskatchewan Valley, and Northern Alberta. The dairy produce of Manitoba alone for 1902 is valued at $747,604. Beet roots are being cultivated in Southern Alberta, and the outlook for the industry is promising.

LIFE SAFE AS IN ENGLAND.

By reason of the superior organization of Canadian justice, the Canadian West affords every immigrant all the social security to which he has been accustomed at home.

The Canadian West offers especial advantages to the man of moderate means and also to the poor man. Thousands of settlers have come from the United States and from Eastern Canada, and with their knowledge of the new world conditions, they rarely make serious mistakes.

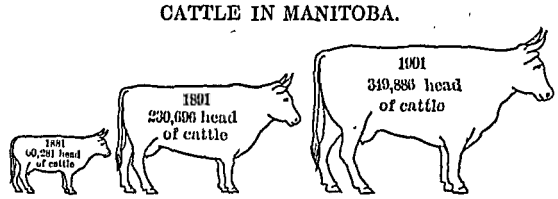
OFFICIAL INFORMATION BUREAUS.

For the convenience of the new settler the Government has established bureaus, from which information is freely given, and has issued many valuable pamphlets giving instruction and advice to the new settler. The Government also maintains experimental farms which give free grain for seed and answer any enquiries addressed them.

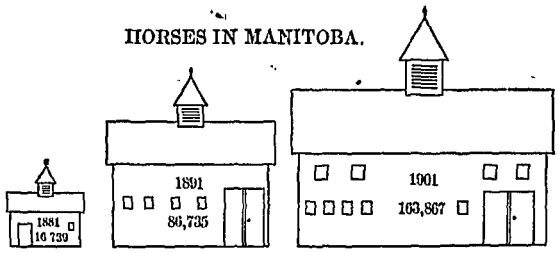
Any sturdy immigrant should, with a little care and perseverance, soon succeed in getting his land under crop. To support himself during the first period of settlement, and to buy a plough, oxen, and other equipment, he should have a little capital, though some settlers first hire out as farm labourers, and then take up land as they become familiar with the country.

COMPARISONS OF GROWTH.

CATTLE IN MANITOBA.



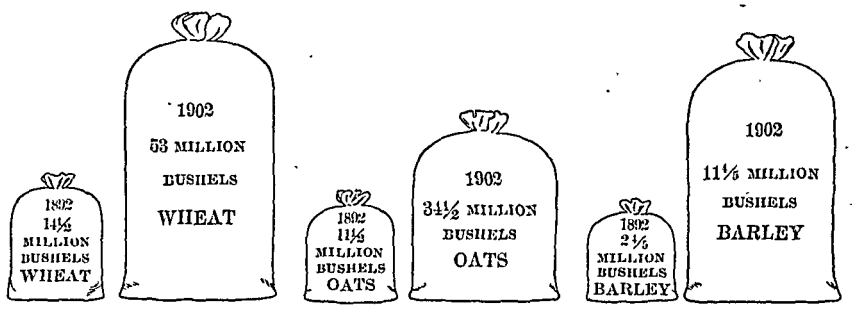
HORSES IN MANITOBA.



MANITOBA CROPS.

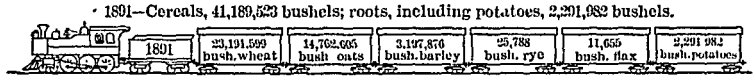
	1902			1903		
	Acres in crop	Yield per acre	Harvest bushels	Acres in crop	Yield per acre	Harvest bushels
Wheat	2,030,910	26	53,077,267	2,442,873	16.42	40,116,878
Oats	725,060	47.5	34,478,160	855,431	38.62	33,035,774
Barley	329,790	35.9	11,848,422	326,537	26 66	8,707,252
Flax	41,200	13.7	564,440	55,000	10.50	586,950
Rye	2,559	19 5	49,900	4,899	18.00	88,182
Pease	1,596	21.4	34,154	2,357	17 60	41,483
	3,140,145		100,052,343	3,687,997		82,576,519
Roots	12,175	265	3,230,995	12,251	282,00	3,452,340
Potatoes	22,005	157	3,459,325	27,198	175,00	4,757,000

INCREASE IN PRINCIPAL CEREALS.

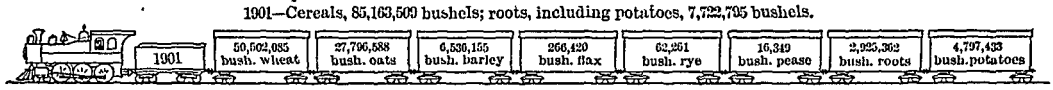


INCREASE IN HARVEST OF ALL CEREALS AND ROOTS.

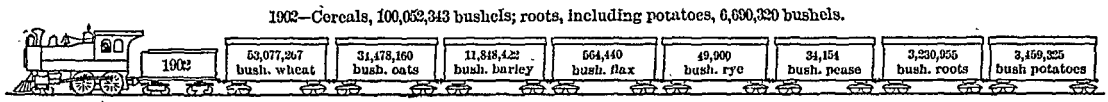
1891—Cereals, 41,189,523 bushels; roots, including potatoes, 2,291,982 bushels.



1901—Cereals, 85,163,509 bushels; roots, including potatoes, 7,722,795 bushels.



1902—Cereals, 100,052,343 bushels; roots, including potatoes, 6,690,320 bushels.

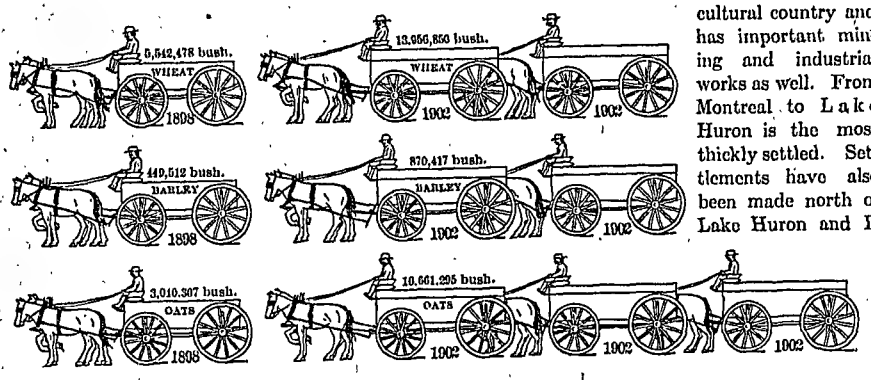


COMPARISONS OF GROWTH (Continued.)

GRAIN HARVEST IN THE THREE TERRITORIES.

	WHEAT			OATS			BARLEY		
	Acreage	Yield	Average	Acreage	Yield	Average	Acreage	Yield	Average
1898	307,580	5,542,478	18.01	105,077	3,040,307	28.93	17,092	449,512	26.29
1899	307,523	6,915,623	19.02	134,938	4,686,030	34.81	14,276	337,421	23.62
1900	412,864	4,028,294	9.75	175,439	4,226,152	24.08	17,044	353,216	20.72
1901	504,697	12,808,447	25.37	220,568	9,716,132	42.88	24,702	705,100	32.18
1902	625,758	13,956,850	22.30	310,307	10,661,295	34.35	36,445	870,417	23.88
1903	837,234	16,020,149	19.00	440,662	14,179,705	32.17	60,667	1,741,209	24.65

THE GROWTH OF FOUR YEARS.



CATTLE AND HORSES IN THE TERRITORIES.

	1881	1891	1901
Cattle	12,572	231 827	591,739
Horses	10,870	60 976	276,462

RESULTS OF EXPERIMENTAL FARM AT INDIAN HEAD FOR SEVEN CONSECUTIVE YEARS.

SPRING WHEAT.

Name of variety	Length of straw	Yield per acre	Weight per Bu.
Red Fife	Averages between 45 in. and 55 in.	42 bu. 5 lbs.	Average 62¾ lbs. for 8 yrs.
Alpha, 4 days earlier than Red Fife		40 bu. 23 lbs.	54¾ lbs for 7 yrs
Preston, 4 days earlier than Red Fife		43 bu. 34 lbs.	63¼ lbs. for 8 yrs.

OATS—AVERAGE FOR SEVEN YEARS.

Abundance	Between 45 in. and 55 in.	93 bu. 11 lbs.	38¾ lbs.
Golden Beauty		87 bu. 22 lbs.	40 lbs.
Banner		88 bu. 27 lbs	39¼ lbs.

BARLEY—AVERAGE FOR SEVEN YEARS.

Mensury	Average from 30 in. to 35 in.	58 bu. 30 lbs.	49½ lbs.
Remin's Improved		58 bu. 28 lbs.	52 lbs
Trooper		57 bu. 4 lbs.	52 lbs.

POTATOES.

American Wonder	Average for 8 years	429 bu 10 lbs.	Long, oval, white
Carmen No. 1		392 bu 3 lbs.	Oval, white
Burnaby Seedling	Average for 7 years	365 bu. 39 lbs.	Long, flat, pink

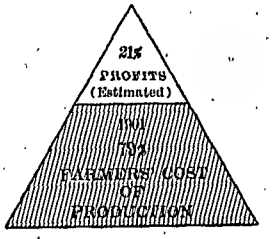
A

VIII.

Agriculture in Ontario.

Population 1901	No. of farmers 1901	Total land area, acres	Per cent of cultivated area under crop	Average size of farms, acres
2,182,047	224,127	141,125,330	72%	115

Ontario includes the most southerly part of Canada. The Province extends to the north as far as James Bay and west as far as Manitoba. It is an excellent agricultural country and has important mining and industrial works as well. From Montreal to Lake Huron is the most thickly settled. Settlements have also been made north of Lake Huron and Lake Superior. This section of Ontario has been given the name of "New Ontario." Roads and railways are opening up many parts of it, and thousands of settlers have begun to found new homes there.



Ontario, extending so far north and south, has a great variety of climate, but the extremes, both in summer and winter, are tempered by large bodies of water.

MIXED FARMING AND FRUIT GROWING.

While wheat is largely grown, other important crops are oats, corn (maize), wheat, pease, and barley and with smaller quantities of rye, buckwheat, and beans. Hay and clover, potatoes, and other root crops, such as turnips and carrots, are extensively grown.

Fruit growing is carried on to a large extent, but its possibilities are as yet only imperfectly known. According to the census of 1901, the area in orchard, garden, and vineyard was 337,000 acres. There were over 9,500,000 apple trees in the Province, 1,280,000 peach trees, and 3,250,000 other fruit trees (pear, plum, cherry, etc.). There were also 2,620,000 grape vines, yielding over 23,000,000 pounds of grapes each year. Canadian markets are well supplied with home-grown fruits, and a large and increasing quantity is exported, chiefly to Great Britain.

The crop of apples in Ontario was over 13,000,000 bushels in 1902—larger than that of any State but one in the United States, and over three times that of the State of New York.

Tomatoes also are extensively grown, a large portion being canned and exported. Other important Ontario crops are flax, hops, and tobacco; 3,500,000 pounds of the latter were raised in 1900, according to the census returns.

During the last ten years dairying has become most important. There are over one million milch cows, and 9,600,000 domestic fowls. A profitable trade is carried on in beef, mutton, pork, and poultry. The egg trade is also a growing branch of industry.

"NEW ONTARIO."

In Northern Ontario over 16,000,000 acres have been explored. During the last ten years the population of this portion of the Province has increased from 15,728 to 145,577. In 1901 upwards of 10,000 new settlers entered to make homes there. The development of mining and other industries north of Lake Superior

has encouraged settlement. The Canadian Pacific Railway runs from Mattawa to Timiskaming, while the provincial government is building a line from North Bay to Liskeard on Lake Timiskaming. Four million acres of good farming land are surveyed and open for settlement. Some of this is given away free to settlers, and some is sold at 50 cents per acre.

STATISTICS OF AGRICULTURE.

ONTARIO'S CROPS AND LIVE STOCK.

GRAINS, ROOTS, AND HAY.

	Average 1882–1902 bushels	1902 bushels	1902 yield per acre bushels
Fall wheat	18,452,817	20,233,669	27.0
Spring wheat	7,092,213	6,048,024	20.0
Barley	16,494,873	21,890,602	33.1
Oats	70,611,052	106,431,439	42.6
Rye	1,963,300	3,509,332	18.5
Peas	13,770,243	7,664,679	14.4
Buckwheat	1,931,170	1,911,683	20.5
Beans	672,406	670,633	12.4
Potatoes	18,304,558	12,942,502	89.
Mangel wurzels	14,436,625	39,140,924	511.
Carrots	3,744,096	3,227,161	374.
Turnips	54,085,586	71,740,204	525.
Corn in ear	21,153,887	20,512,194	55.
	Tons	Tons	Tons
Corn green	1,853,333	2,611,334	12.44
Clover and hay	3,451,960	4,055,438	1.87
		Pounds	Pounds
Tobacco		3,070,717	1,037

FRUITS.

	Number 1902	Yield, bushels
Apple trees	10,471,794	48,185,125

	Acres in vineyard 1900	Number of vines	Yield, pounds
Grapes, 1901	5,440	2,620,036	23,156,478

FARM ANIMALS.

Sheep	1901	1,046,456
Horses	1901	721,138
Cattle	1901	2,487,806
Swine	1901	1,562,696
Poultry	1901	10,464,551

VALUES OF FARMS AND PRODUCTS, 1900.

Value of farm lands, buildings, and implements	$800,660,307
Value of live stock	131,827,762
Value of field crops	110,311,533
Total value of farm and animal products	196,952,362
Live stock sold and total animal products	86,640,829
Value of farm property, including live stock	932,488,069
Average value of Ontario farms (1901)	4,967

IX.

Agriculture in Quebec.

Population 1901	No. of farmers 1901	Total area of land acres	Area under crop 1900	Per cent of improved land under crop	Average size of farms
1,648,898	150,599	218,723,687	4,704,396	63%	111 acres

Farming in Quebec is very like farming in Ontario. The summer weather is much the same, but the winters are somewhat longer and steadier. As a result there is not so much fruit raising as in Ontario.

"NEW QUEBEC."

The movement of settlement toward Northern Quebec is becoming important. The most active colonization is in the Lake St. John district, 176 miles northwest of Quebec City. The Saguenay River drains Lake St. John into the St. Lawrence, while the Quebec & Lake St. John Railway connects the district with Quebec City. A number of flourishing villages have been established. Upwards of 11,000 new settlers have gone there from the older portions of Canada, from the United States, and from Europe. The settlements have ample railway, steamship, telegraph, and telephone facilities. A second scene of colonizing is the Timiskaming district, east of the Ottawa River, opposite the settlements in "New Ontario."

DAIRYING AND FRUIT GROWING.

In the settled portions the dairy industry has grown rapidly of late years. As a result, a great deal of the hay and grain that the farmers formerly exported is now more profitably consumed where it is grown. Tobacco is also an important crop. In 1900, 7,656,000 pounds were produced in Quebec. The chief fruit district is the Valley of the St. Lawrence, particularly the portion south of the river.

STATISTICS OF AGRICULTURE.

YIELD OF GRAINS, ROOTS, AND HAY, 1900.

	Bushels
Wheat	1,908,203
Barley	2,535,597
Oats	33,536,677
Rye	211,287
Corn in ear	1,384,331
Buckwheat	1,849,596
Peas	908,656
Beans	61,376
Mixed grains	3,523,507
Potatoes	17,135,739
Other roots	3,526,187
	Tons
Hay	2,581,823

VALUES OF FARMS AND PRODUCTS, 1901.

Value of Quebec farms (grand total)	$436,076,916
Value of farms, buildings, and implements	377,588,459
Value of live stock	58,488,457
Average value of farm	3,305
Value of live stock sold during year and total animal products	37,554,368
Field crops, fruits, and vegetables	47,480,033
Total value of crops and animal products	85,034,401

X.

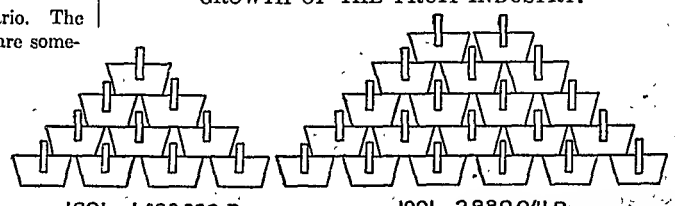
Agriculture in the Maritime Provinces.

Province	Population 1901	No. of farmers 1901	Area of land acres 1901	Per cent of improved area under crop acres 1900	Average size of farms acres 1901
New Brunswick	331,120	37,583	17,863,266	64 0%	127
Nova Scotia	459,574	56,033	13,483,671	60.0%	107
Prince Edward Island	103,259	14,014	1,397,991	61.6%	91

DAIRYING AND FRUIT GROWING.

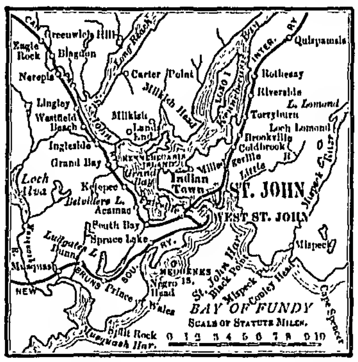
In the maritime section of Canada, mixed farming is carried on. Farmers pay great attention to dairying and to fruit growing, particularly in Nova Scotia and Prince Edward Island.

GROWTH OF THE FRUIT INDUSTRY.



In the fertile valleys the choicest varieties of apples, pears, plums, and cherries grow in abundance. Large shipments of fruit are sent to the United States and to Europe. Strawberries and other small fruits ripen here after the earlier harvests of the south have been consumed, and find a ready market in the New England cities.

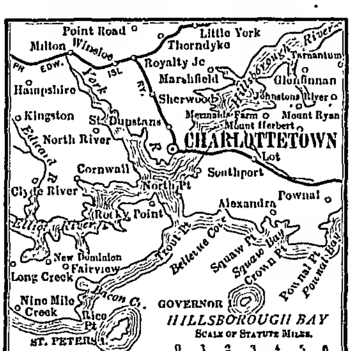
The other important crops are oats, wheat, potatoes, and hay. Barley, buckwheat, and rye also are grown. Stock-raising is on the increase. In New Brunswick and Nova Scotia "new" land is each year brought under cultivation.



STATISTICS OF AGRICULTURE.

YIELD OF GRAINS, ROOTS, AND HAY.

1900	Nova Scotia bushels	N. Brunswick bushels	P. E Island bushels
Spring wheat	246,325	376,726	738,679
Fall wheat	2,151	4,973	....
Barley	181,085	99,050	105,625
Oats	2,347,598	4,816,173	4,561,097
Rye	15,702	2,809	65
Corn in ear	9,358	12,509	834
Buckwheat	196,498	1,390,885	49,689
Pease	3,067	16,808	2,245
Beans	16,084	13,573	496
Mixed grains	90,869	27,706	227,146
Potatoes	4,394,413	4,649,059	4,986,633
Other roots	2,074,806	2,070,486	3,932,501
	Tons	Tons	Tons
Hay	658,330	512,584	168,326



VALUES OF FARMS, 1901.

	Total value.	Average per farm.
New Brunswick	$51,338,311	$1,441
Nova Scotia	72,564,907	1,488
Prince Edward Island	30,626,713	2,314

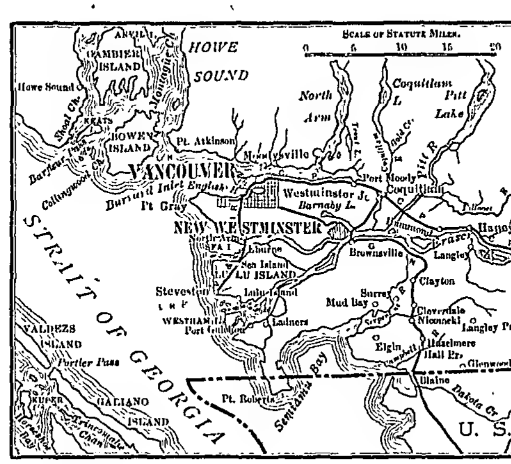
XI.

Agriculture in British Columbia.

Population 1901	No. of farmers 1901	Land acres 1901	Per cent of improved land under crop 1900	Average size of farms acres 1901
178,657	6,739	230,922,177	36%	252

British Columbia is the great mining Province of Canada. Its many splendid valleys and level plateaus are exceedingly fertile, while its climate is mild and equable. The weather in British Columbia is much like that of many parts of England, and the holly, yew, and laurel flourish with the apple, pear, plum, cherry, and, in some districts, the peach.

The heavy growth of timber in many parts has prevented farming being carried on extensively, but of recent years ranching and dairying have been growing. Of the cereal crops oats are the most important. The extent of agriculture in this Province will grow with the spread of mining both in the south and in the north.



STATISTICS OF AGRICULTURE.

YIELD OF GRAINS, ROOTS, AND HAY.

		1890	1900
Oats	Bushels	943,088	1,442,566
Spring wheat	Bushels	318,453	267,678
Fall wheat	Bushels	69,847	91,741
Barley	Bushels	79,024	73,790
Rye	Bushels	6,141	17,328
Potatoes	Bushels	685,802	955,946
Other roots	Bushels	516,242	635,988
Hay	Tons	102,146	170,187
Tobacco	Pounds	343	61,830
Hops	Pounds	55,288	299,717
Butter	Pounds	393,089	1,092,555
Eggs	Dozens	......	1,649,741

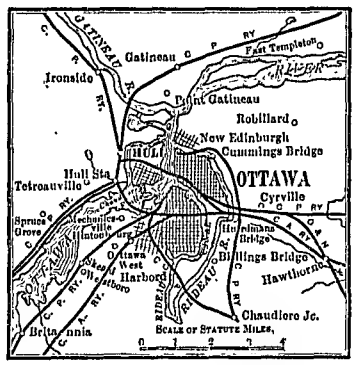
FARM PROPERTY VALUES, 1901.

Total value of farm property $33,491,978
Average value per farm $5,467
Value of farm buildings and implements $27,287,665
Value of live stock $6,204,313

XII.

Instruction in Agriculture.

The Government of Canada pays careful attention to agriculture, sending expert advice to the farmers through bulletins and by letter, when asked, and carrying on various farming experiments in different parts of the Dominion. This system is the most thorough of its kind. There is a Dominion Department of Agriculture and there are also, in all the Provinces, Ministers or Secretaries of Agriculture, who look after the varied interests of the farming community.



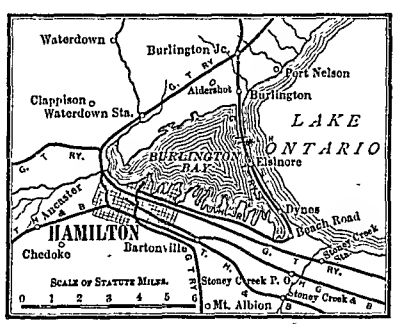
AGRICULTURAL SCHOOLS.

In Ontario, Quebec, Nova Scotia, and Manitoba there are special agricultural schools. Dairy schools have been established in most of the Provinces, and there are also many farmers' institutes; live stock, fruit growers', agricultural, and horticultural associations; and travelling dairies, all assisted by the several Provinces. Valuable practical experiments are carried on, and the results distributed in Government reports and special bulletins, to all who apply.

The largest agricultural school is the Ontario Agricultural College at Guelph, Ontario, founded in 1874. It has a large staff of experts and gives a splendid course of training in all branches of agriculture. A short course lasts for two years, and is intended to prepare young men for life on the farm. A student may remain a third year and go up for the examination for the degree of Bachelor of the Science of Agriculture (B. S. A.). This admirable college is known throughout America and abroad.

EXPERIMENTAL FARMS.

The work done by the five Dominion experimental farms is of great value and interest. The central farm is located at Ottawa; two are in the Northwest (at Brandon and Indian Head); one at Agassiz, British Columbia; and one at Nappan, Nova Scotia. Specialists carry on experiments in all branches of agriculture, the results being published in bulletin form. During the last few years seeds and specimens have been sent out through the mails to about 200,000 farmers.



In addition there are held annually, in almost every part of Canada, agricultural fairs, at which the products grown by the farmer are shown, addresses are given, and prizes awarded. In fact, agricultural education is so thorough that Canadian instructors are sent for by foreign Governments and large farmers in various parts of the world, as for example, in the United States, South Africa, and Australia.

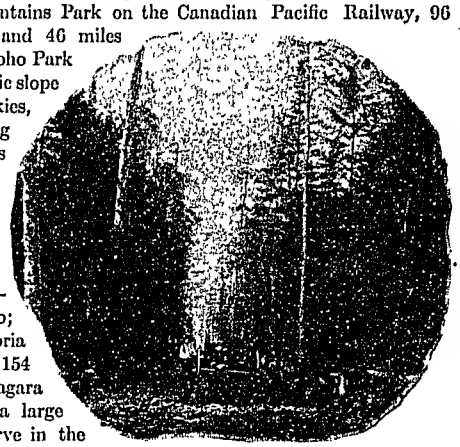
XIII.

Forests of Canada.

Some people in Europe think that forests still surround all the cities and farms of Canada, but this, of course, is not the case. All the settled portions are cleared of their timber almost as completely as in Europe. A great deal of wood has been used for building homes, for railways, for fuel, and for all kinds of manufactures, while millions of feet have been exported.

FOREST RESERVES.

Great reserves of unbroken forest in various portions of the Dominion have been set apart as national parks. Such are the Rocky Mountains Park on the Canadian Pacific Railway, 96 miles long and 46 miles wide; the Yoho Park on the Pacific slope of the Rockies, 40 miles long and 15 miles wide; the Algonquin National Park, of 1,200,000 acres, in Central Ontario; Queen Victoria Park, of 154 acres, at Niagara Falls; and a large timber reserve in the Timiskaming district. In Northern Quebec a tract of 1,620,000 acres in which a dozen or more rivers originate, has been set aside. These reserves are, of course, very small in comparison with the forest area still left.



Roadway in a Timber District.

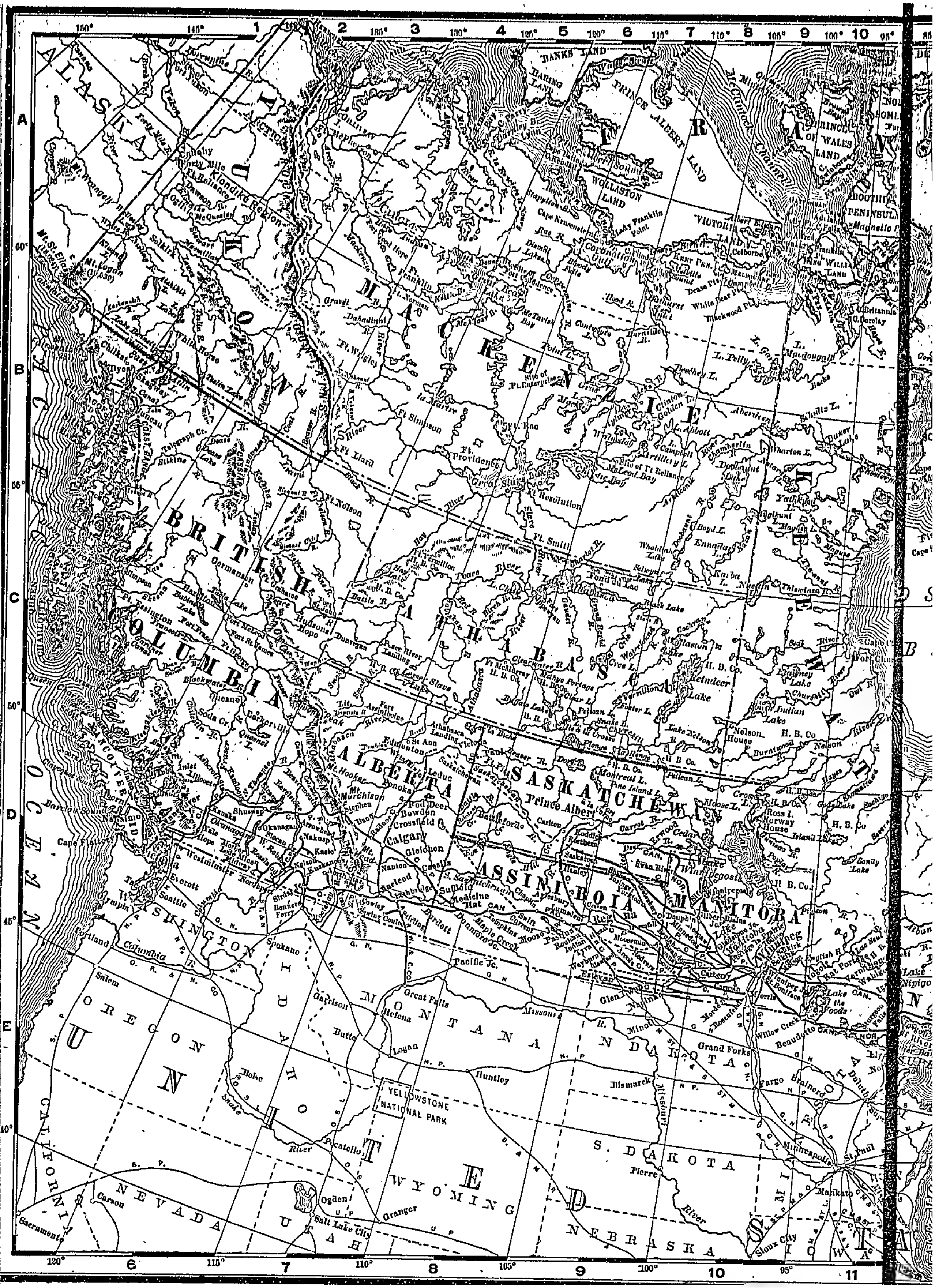
FORESTS OF THE MARITIME PROVINCES.

New Brunswick and Nova Scotia have each over four thousand square miles of forest. Along the coast the spruce and fir are chief trees, but in the higher uplands of the interior, hardwood trees, such as maple, beech, ash, and birch, are most numerous. There is also some spruce and pine. When the hard woods are cut down, spruce, balsam, birch, and tamarack grow up in their place. These forests enrich the soil, and when cleared, the land is suitable for stock raising and fruit growing.

Outside the Maritime Provinces there are three great forest belts in the Dominion: (1) the British Columbia belt; (2) the Southern timber belt; and (3) the Northern spruce belt.

FORESTS OF BRITISH COLUMBIA.

The British Columbia forest belt extends 770 miles northward, and is from 200 to 300 miles wide. Owing to the mild climate a great number of different species thrive here, some of them attaining an enormous size. Here are found not only the valuable red fir or Oregon pine, but also the red and yellow cedar, the western spruce, white and yellow pine, the maple, and western oak. In the northern portion black and white spruce become more plentiful and constitute an extensive pulp wood range. British Columbia has the most valuable timber belt on the North American continent.


ALASKA
YUKON
MACKENZIE
BRITISH COLUMBIA
ATHABASCA
ALBERTA
SASKATCHEWAN
ASSINIBOIA
MANITOBA
KEEWATIN
PACIFIC OCEAN
BANKS LAND
BARING LAND
PRINCE ALBERT LAND
WOLLASTON LAND
VICTORIA LAND
PRINCE OF WALES LAND
BOOTHIA PENINSULA
M'Clintock Channel
Klondike Region
Dawson
Mt. St. Elias
Mt. Logan
Skagway
Ft. McPherson
Ft. Good Hope
Ft. Norman
Ft. Franklin
Ft. Simpson
Ft. Providence
Ft. Resolution
Ft. Smith
Ft. Liard
Ft. Nelson
Ft. Rae
Great Slave Lake
Lake Athabasca
Fond du Lac
Reindeer Lake
Churchill Lake
Peace River
Ft. Chipewyan
Ft. McMurray
Lesser Slave Lake
Edmonton
Calgary
Red Deer
Prince Albert
Battleford
Saskatoon
Regina
Moose Jaw
Medicine Hat
Lethbridge
Macleod
Winnipeg
Brandon
Lake Winnipeg
Lake Winnipegosis
Lake Manitoba
Norway House
Nelson House
York Factory
Vancouver
Victoria
Westminster
Nanaimo
Kamloops
Barkerville
Quesnel
Cariboo
Cape Flattery
Queen Charlotte Islands
Vancouver Island
Seattle
Tacoma
Olympia
Portland
Spokane
Salem
Helena
Butte
Great Falls
Garrison
Logan
Huntley
Bismarck
Minot
Grand Forks
Fargo
Duluth
St. Paul
Minneapolis
Mankato
Sioux City
Pierre
Pocatello
Boise
Ogden
Salt Lake City
Granger
Carson
Sacramento
WASHINGTON
OREGON
IDAHO
MONTANA
N. DAKOTA
S. DAKOTA
WYOMING
NEBRASKA
NEVADA
UTAH
IOWA
CALIFORNIA
UNITED
YELLOWSTONE NATIONAL PARK
Missouri R.
Columbia
150°
145°
140°
135°
130°
125°
120°
115°
110°
105°
100°
95°
60°
55°
50°
45°
40°
1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E


Longitude West from Greenwich.
DOMINION OF CANADA
AND
NEWFOUNDLAND
SCALES.
Statute Miles, 230 = 1 Inch.
Kilometres, 370 = 1 Inch.
Rand, McNally & Co, Engravers, Chicago
BAFFIN BAY
GREENLAND
ARCTIC CIRCLE
LABRADOR
HUDSON BAY
ATLANTIC OCEAN
GULF OF ST. LAWRENCE
NEWFOUNDLAND
PRINCE EDWARD ISLAND
NOVA SCOTIA
NEW BRUNSWICK
MAINE
Copyright, 1904, by Rand, McNally & Co.
Copyright, 1902, by Rand, McNally & Co.

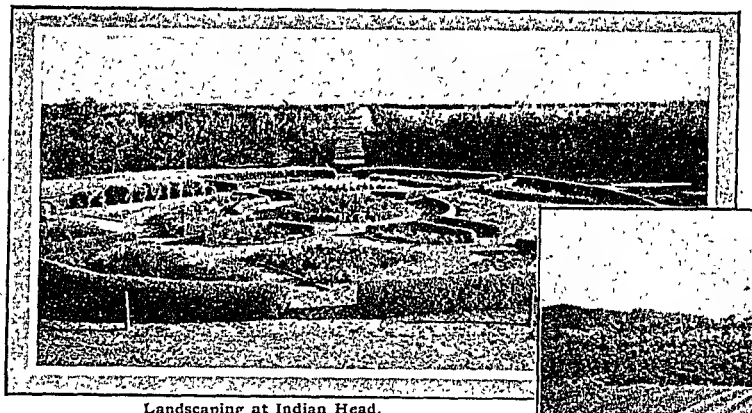
NORTHERN SPRUCE BELT.

The Northern belt is perhaps larger than all the other timber belts and reserves of Canada combined. It covers practically the whole of the Laurentian Highland, that is, from Labrador to the Mackenzie River, a distance of some 3,000 miles, with an average width of over 200 miles. This is the greatest spruce forest in the world, and it also contains some larch and poplar. Only part of it has been explored, but it is probable that in the southern portion are great quantities of merchantable timber.

The spruce logs are ground into pulp, from which paper is made. The spruce area of Canada is so great that it is hardly an exaggeration to say that the Dominion possesses an inexhaustible supply of pulp wood.

SOUTHERN TIMBER BELT.

This great timber belt comprises the portion of Ontario and Quebec between the 45th and the 50th parallels of latitude, and



Landscaping at Indian Head.

then runs northwesterly to the Peace River country in Athabaska. The king of this belt is the white pine. It has been calculated that about one-third of the trees in this belt are 100 years old, and another third over 10 years old. The hard maple is abundant in the southern half of Ontario and Quebec.

TOTAL FOREST PRODUCE EXPORTED.

The total produce of Canadian forests exported in a series of years is as follows:

1873.	1883.	1893.	1903.
$29,298,917	$25,811,157	$26,359,910	$36,386,015

Of the exports of 1903 $28,850,000 were lumber, $1,558,560 pulp wood, and $2,551,664 square timber. Besides these there were exported $4,474,000 of manufactures of wood, the chief of which was wood pulp, $3,150,943.

TRANSPORTATION IN THE FOREST.

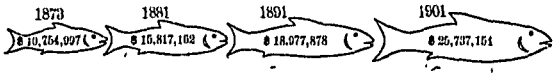
All the railways of Canada traverse, in part, one or other of these forest belts. Lumbering and settlement go hand in hand. The farmer who settles in a wooded country works his land in summer and is a lumberman in winter. The snows of winter make splendid roads over which the lumberman can draw his logs to some nearby stream. In the spring the logs are floated down for long distances to the sawmill. The Grand Trunk Pacific Railway, to pass through Canada from the Atlantic to the Pacific, will open up great areas of untouched forest north of the Canadian Pacific Railway.

XIV.

The Fisheries of Canada.

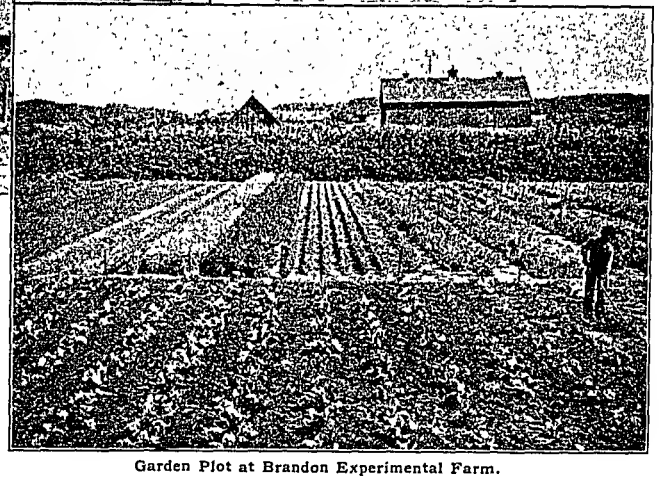
Fishing is capital sport, and it is also the means of livelihood of thousands of Canadians. Once, great quantities of fish were caught in most waters of North America, but over-fishing and the harmful drainage into the rivers of the factories and towns

GROWTH IN VALUE OF CANADA'S FISHERIES.



on their banks have destroyed the fish in many rivers in the United States. Thus Canada has become the fishing ground of North America. On the Atlantic and Pacific coasts are extensive fisheries, while countless lakes, with their tributary streams, teem with fish of the greatest value as food.

Hundreds of foreign vessels, including many from the United States, come to the Canadian waters to share in these treasures. It is estimated that 78,000 Canadian fishermen thus find employment. Their boats, nets, and gear are valued at $11,500,000 and their annual catch at $25,737,154. There are, moreover, extensive waters yet unfished, which in the near future will add to the value of the catch.



Garden Plot at Brandon Experimental Farm.

ATLANTIC AND PACIFIC COAST FISHERIES

The deep shore and inland fisheries on the Atlantic extend from the Bay of Fundy to Labrador. The chief fish catch is of cod, mackerel, haddock, halibut, herring, lobster, oyster, seal, and white whale. The annual value is about $10,000,000.

The oyster found on this coast differs only in a special way from the European species, and multiplies much more rapidly. The beds are extensive, and the annual take of about 70,000 barrels is only a tithe of the possible yield. At present the oysters are shipped on ice as far as England. Lobsters are canned and in this form may be sent anywhere without spoiling. Great quantities of fish are salted and sent to foreign parts.

The vast salmon industries on the Pacific Coast are in some respects the most remarkable in the world. In the season when

fish are running up-stream, the flow of the water actually is impeded, in the shallow places, by their numbers. Standing on the bank one sees the whole river red with the gleam of their sides, from which the scales have been rubbed in beating against the rocks and one another. Canning factories are built on these streams, and each year 9,000,000 to 10,000,000 fish are canned.

There is also a great variety of other food fishes, such as halibut, anchovy, herring, and smelt. The caviare industry has been developed recently, and whale, shark, and oyster fisheries also exist. Eight million dollars is the value of the fish caught each year in British Columbia. In addition to these coast fisheries, nearly $500,000 worth of seal skins are taken in the open season.

Province	Value of Catch
Ontario	$1,428,079
Manitoba and Territories	958,410
Quebec	2,174,459
Nova Scotia	7,089,548
New Brunswick	4,193,264
British Columbia	7,042,771
Prince Edward Island	1,050,623
Total	$25,737,154

HOW CANADA'S FISH EXPORT TRADE IS DIVIDED.

Great Britain	$6,374,877
Other parts of the British Empire	1,499,463
United States	4,184,403
France	442,631
Other countries	1,641,920

INLAND AND NORTHERN FISHERIES.

In the Great Lakes and their numerous tributary streams are found many excellent fish—whitefish, trout, herring, sturgeon, pickerel, pike, bass, maskinonge, etc. The fish caught each year are worth $2,400,000.

In the lakes of Manitoba and the Great Northwest, most of the fish just named are found. The caviare industry also is growing; the production in 1902 was valued at $1,000,000.

The lakes and rivers of the Rocky Mountains are favourite resorts of sportsmen. Trout, Pacific salmon, varieties of carp, which differ from the eastern species, and other fish are caught.

A Northwest Mounted Policeman.

GOVERNMENT FISH PROTECTION.

The Dominion and Provincial Governments give especial attention to the protection of fish and game. The Department of Marine and Fisheries carries on fish culture, introducing fish into new waters and preventing the exhaustion of the present supply. There are fourteen Government hatcheries, which distributed in 1902, 422,000 000 fry.

The eastern seacoast from the Bay of Fundy to the Straits of Belleisle covers a distance of 5,600 miles. On the Atlantic side the Canadian coast line is fully 10,000 miles long; and on the Pacific not less than 7,200 miles long. The Great Lakes of the Laurentian system, exclusive of Lake Michigan, have a fishing area of over 72,000 square miles.

Hudson Bay and the coast waters from Ungava to Mackenzie River are the richest whaling grounds in the world, and the last home of the right whale (producing whalebone), which has, within the memory of living man, been driven from around Newfoundland. The walrus and many valuable fish, such as sea-trout, salmon, and cod, are found in these waters. The northern rivers and lakes teem with inconnu (a huge fresh-water whitefish), pike, and sturgeon.

FISH STATISTICS FOR 1901.

Kinds of Fish	Value
Salmon	$7,221,387
Cod	4,033,264
Lobsters	3,245,881
Mackerel	1,372,459
Herring	1,865,394
Haddock	782,163
Whitefish	783,465
Trout	663,642
Smelt	485,874
Halibut	394,021
Pickerel	339,686
Sardines	562,965
Oysters	179,488
Sealskins (B. C.)	366,330

In 1902 Canada exported fish valued at $14,143,294.

XV.

Mining in Canada.

In earlier years Canadians devoted most of their attention to agriculture, lumbering, and fishing, to the neglect of mining, although the country contained many very valuable mineral deposits. During the last few years coal, gold, nickel, copper, silver, lead, iron, asbestos, and petroleum have been largely developed.

British Columbia and Nova Scotia are the chief mining provinces but in Ontario and Quebec also are important mineral deposits. Extensive coal areas have been found in Western Canada, and new railways are continually opening up additional territory.

In 1901 Canada's mineral production was valued at $66,712,708 and her mineral exports at $42,310,800 over nine-tenths of which was exported to the United States.

COAL AND IRON.

The Vancouver Island (British Columbia) mines produce a coal of excellent quality, which supplies the demand in the Province and is also shipped to the principal ports of the Pacific Coast of the United States. The coal deposits of Nova Scotia underlie an area of about 635 square miles. The chief workings are in the Sydney, Pictou, and Cumberland fields. The Nova Scotia mines are the largest producers in Canada.

At Lethbridge a mine has been opened on a large seam of bituminous coal, the outcrop of which has been traced for many

miles. Coals and lignites are found as far east as the western portion of Manitoba and underlie an area of not less than 60,000 square miles. A semi-anthracite is mined near Canmore, in the Rocky Mountains. The largest workings in Assiniboia are at Estevan, 325 miles from Winnipeg. The last-named mines—in the Souris field—and the Lethbridge mines supply the Territories and Manitoba. The coal beds extend far down the Saskatchewan and northward into the valley of the Peace River. It is no uncommon thing in this district to see the agricultural settler driving up to the pit's mouth for his household supply of coal, easily obtained at prices ranging from $1 to $2 a ton.

In Nova Scotia, iron is found near the coal, thus permitting economical smelting. Iron ore is also brought by ship from Newfoundland. Large areas of iron ore have been found north of Lake Superior in Ontario, in Eastern Ontario, in Quebec, and in Ungava. The range north of Lake Superior is the northern extension of the great Mesabi Range in Minnesota. Large steel works have been established at Sydney and Ferrona, Nova Scotia, and at Sault Ste. Marie, Ontario. There are iron smelters at Rawdon (Quebec) and at Deseronto, Hamilton, and Midland (Ontario).

NICKEL AND COPPER.

In these days of giant constructions such as the Forth and Quebec bridges and the Eiffel Tower, engineers are demanding increased strength without material increase of weight. As the addition of a small proportion of nickel to steel largely increases the tensile strength of the latter, nickel ores are of great and growing importance, particularly as there are only two producing localities of consequence in the world—the Sudbury district in Ontario and the French colony of New Caledonia. The Ontario mines contain enough ore to supply the needs of the world for all time.

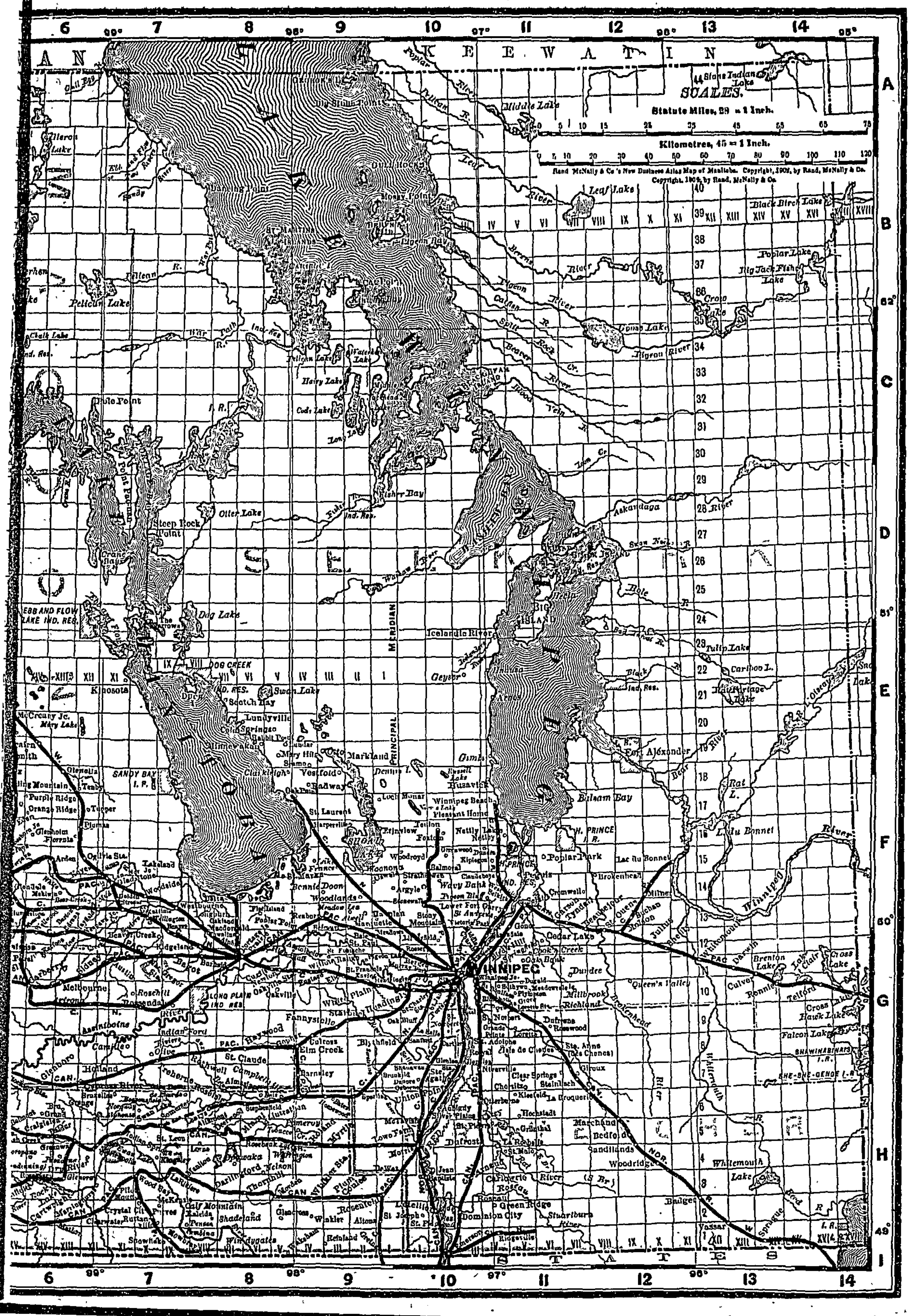
Most of the copper output of Ontario is produced as a by-product of nickel, and that of Quebec, as a by-product of pyrites mined for the production of sulphuric acid. In 1902 British Columbia produced about 30,000,000 pounds of copper, most of which was mined in the West Kootenay district. There are also very large deposits in the Howe Sound, Texada Island, Mount Sicker, and other districts.

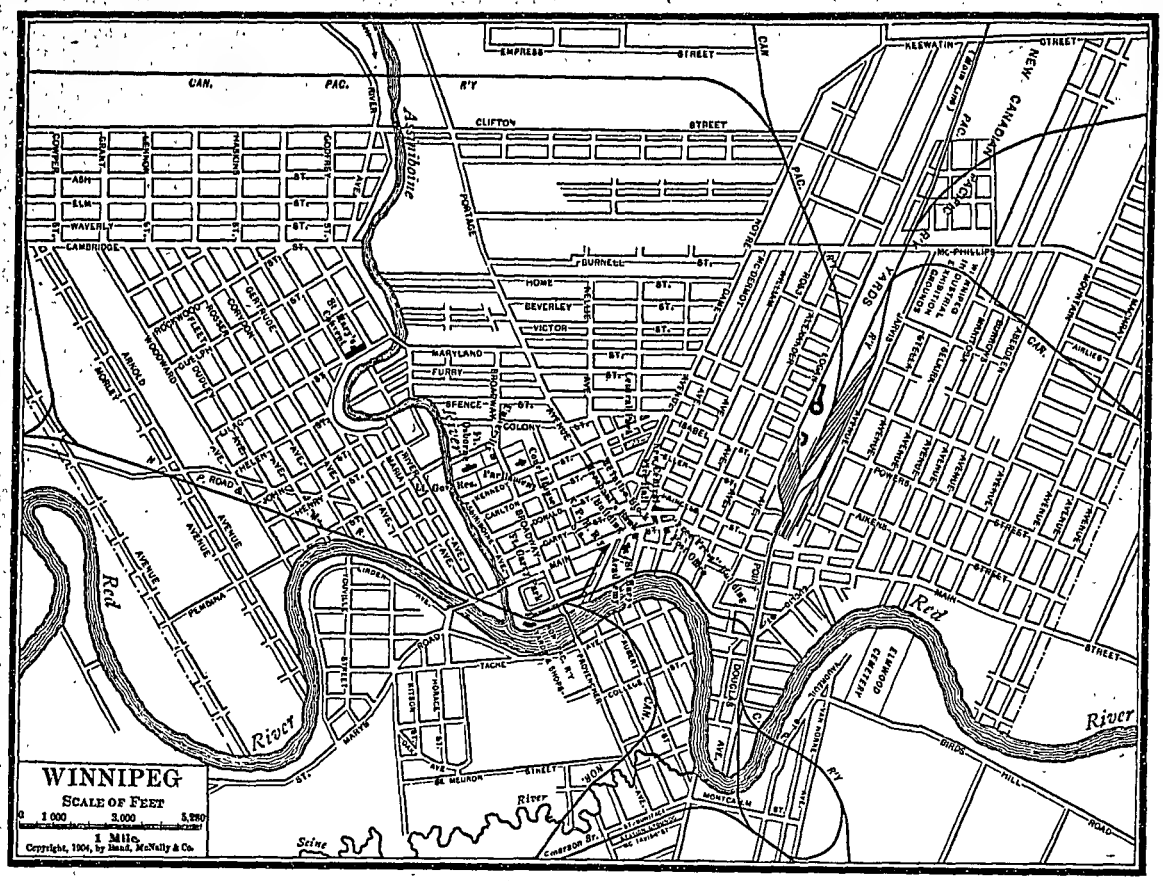
ASBESTOS AND MICA.

Asbestos is valuable for steam-packing, and for the manufacture of fire-proof goods. Practically all the first quality asbestos that is marketed in the world is produced at the Thetford, Black Lake, and Danville mines in Southeastern Quebec. Large quantities of mica are mined in Quebec and in Ontario. It is used as an electrical insulator and in stoves.

GOLD AND OTHER MINERALS.

There are gold mines in Nova Scotia, Ontario, British Columbia, and Yukon, and the precious metal has been found in nearly all the other Provinces and Territories. The gravels of the Chaudière River in Quebec and of the Saskatchewan in the West have yielded gold. The Yukon placers are producing more gold than any other placer mines in the world, and since the wonderful Klondike "rush" in 1897, when fifty or sixty thousand people sought this far northern country, $90,000,000 in gold has been taken out. The minerals already mentioned are only the most important ones, but many minor minerals of value are produced, as, for instance, graphite, soap-stone, gypsum, corundum, apatite; building materials, such as limestone,


KEEWATIN
SCALES.
Statute Miles, 29 = 1 Inch.
Kilometres, 45 = 1 Inch.
Rand McNally & Co.'s New Business Atlas Map of Manitoba. Copyright, 1902, by Rand, McNally & Co.
Copyright, 1904, by Rand, McNally & Co.
Stone Indian Lake
Middle Lake
Leaf Lake
Black Birch Lake
Poplar Lake
Big Jackfish Lake
Crow Lake
Pelican Lake
Otter Lake
Dog Lake
Swan Lake
Scotch Bay
Steep Rock Point
Crane Bay
Fisher Bay
Icelandic River
Geysir
Gimli
Hnausa
Arnes
Fort Alexander
Balsam Bay
Winnipeg Beach
Husavick
Meridian
Principal
Lac du Bonnet
Winnipeg River
Pinawa
Selkirk
WINNIPEG
St. Boniface
Cedar Lake
Millbrook
Richland
Dufresne
Rosewood
Ste. Anne
Dundee
Queen's Valley
Brokenhead
Beausejour
Stony Mountain
Lower Fort Garry
Oak Point
St. Laurent
Westbourne
Portage la Prairie
Headingly
White Plain
Oakville
Fannystelle
Elm Creek
Carman
Holland
Treherne
St. Claude
Cypress River
Glenboro
Roland
Morris
Union Point
Letellier
Emerson
Dominion City
Stuartburn
Green Ridge
Roseau River
Marchand
Bedford
Sandilands
Woodridge
Whitemouth
Whitemouth Lake
Badger
Vassar
Sprague
Falcon Lake
Hawk Lake
Cross Lake
Telford
Ronnie
Culver
Darwin
Brenton Lake
Plum Coulee
Altona
Gretna
Rosenfeld
Windygates
Snowflake
Crystal City
Manitou
Pilot Mound
La Riviere
Cartwright
Killarney
Darlingford
Thornhill
Morden
Miami
Myrtle
St. Leon
Somerset
Swan Lake
Baldur
Belmont
Wawanesa
Melbourne
Rosebank
Austin
MacGregor
Arden
Neepawa
Gladstone
Kinosota
Ochre River
Dauphin
Glenella
Ebb and Flow Lake Ind. Res.
Sandy Bay I. R.
Mary Lake
McCreary Jc.
Lundyville
Oak Bluff
Sanford
St. Adolphe
St. Norbert
Niverville
Otterburne
Steinbach
Grunthal
Hochstadt
Kleefeld
Giroux
Clear Springs
Lorette
Dufrost
St. Jean
Rosenfeld
Winkler
Gladstone
Lakeland
Clarkleigh
Vestfold
Markland
Rat L.
Bear
U N I T E D   S T A T E S



sandstone, and granite, besides clays for brick, tiles, and cement. There are salt, petroleum, and gas wells in Ontario, and peat deposits have been worked in Ontario and in Quebec. The mineral resources of Canada, though extensive, are largely undeveloped. During the last few years, however, the production has steadily increased till the amount per head of population is almost equal to that of the United States.

XVI.

Manufacturing in Canada.

With her vast mineral, fish, timber, and other resources, Canada is destined to become a great industrial and commercial country. During the last ten years the growth of her manufactures has been marvellous. The value of the products of factories employing five or more hands, as given by the census returns of 1901, was $481,053,375. Though the demands of the home market have largely increased, the exports of manufactures have grown from $13,000,000 in 1879 to $50,500,000 in 1903. The record of foreign commerce for the past few years shows that Canada's foreign trade is increasing more rapidly, proportionately, than that of any other country, the rate of gain in the past ten years having been 90 per cent.

MANUFACTURES FROM AGRICULTURAL PRODUCTS.

The agricultural wealth of Canada forms the basis for many important industries. There are grains for the miller; fruits and vegetables for the canner; beef, pork, and mutton for the dressed meat enterprises; and cream for the butter and cheese factories. Much of the Canadian wheat is shipped direct to Europe (where it is sometimes mixed with softer grain from other countries), and, in addition, nearly 6,000,000 bushels are ground in Canada and exported. In 1903, 1,288,000 barrels of flour, 145,000 barrels of oatmeal, and 11,251 barrels of other meal were exported. Other mills manufacture cereal foods. Formerly butter and cheese were manufactured solely in the farmhouse by the farmers' wives and daughters. Now the industry has passed largely into the hands of co-operative creameries and cheese factories, in which the most improved methods are used. At the World's Fair, in Chicago, a few years ago, Canadian butter and cheese took 424 prizes. In 1903 Canada exported 229,100,000 pounds of cheese (of which 228,394,482 pounds were shipped to Great Britain) and 34,128,944 pounds of butter (of which 32,203,944 pounds went to the mother country). In a certain sense the leather trade may be called an industry associated with agriculture, in that it works up the hides of cattle. The development of the tanning industry has been highly satisfactory, the export amounting to nearly $2,400,000. Other important leather industries are the manufactures of boots, shoes, harness, saddlery, and leather goods. The pork (bacon, ham, and pork) packing industry is an important one. In 1903 the exports aggregated 143,288,402 pounds, of which 141,742,528 pounds were exported to Great Britain. Exports of canned meat, fruit, fish, and vegetables are rapidly increasing in value, totalling more than $6,000,000 in 1903 as compared with $3,700,000 in 1893.

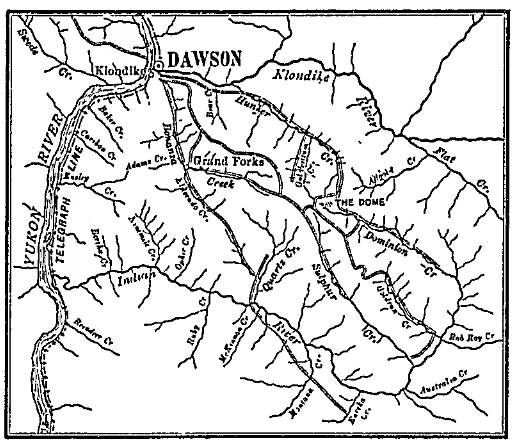
MANUFACTURES FROM FOREST PRODUCTS.

Lumbering has always been one of Canada's chief industries, especially for foreign trade. Exports of forest products, which constituted in 1867 one-third of the total exports, are still of

great importance, though the proportion has fallen to one-sixth. About one-twelfth is square timber and logs, the remainder being sawn lumber, shingles, etc. The total value of lumber exports in 1903 was $36,386,015, nearly one-half going to Great Britain. Thirty-five mills are in operation, converting spruce into wood pulp. These large mills will soon influence more largely the markets of the West, and Canadian forests are now looked upon as the great source of supply of pulpwood. The manufacture of furniture, vehicles, matches, and other wood products besides paper is making rapid progress.

FISH CANNERIES.

On Canada's world-famed fisheries rest many important industries. Eighty thousand men and a capital of $11,000,000 are employed in them. The fish are smoked, canned, or pickled for export, or shipped in cold storage to Canadian cities, to the United States, and to the West Indies. The salmon canning industry on the Pacific Coast is very important, the exports in 1902 aggregating over 49,000,000 pounds. Lobster canning on the Atlantic Coast is a considerable industry.



INDUSTRIES CONNECTED WITH MINING.

Great natural advantages, such as location at an ice-free port, proximity to the coal mines, and consequent low cost of ore at the smelter, make it possible for the Nova Scotia ironmasters to produce steel as cheaply as the great plants in the United States. A large amount of capital has been invested at Sydney and Ferrona, Nova Scotia, and at Sault Ste. Marie on Lake Superior. There are also important rolling mills and foundries, and special lines of machinery are manufactured, such as agricultural implements and electrical and mining machinery. Among other industries are cotton and woolen mills, tobacco factories, sugar and petroleum refineries, breweries, and distilleries.

XVII.

Canadian Water Powers.

Canada's water powers are certain to play a tremendous part in her industrial development.

If water could be employed to turn the wheels of every factory one of the chief elements in cost of production would be eliminated. Already in Canada many industries get power in this way. Many more will follow in time, for Canada is the country of running waters. The Laurentian Highland constitutes "a gathering ground for many large and almost innumerable small rivers and streams, which, in the sources of power they offer in their descent to the lower adjacent levels, are likely to prove of greater and more permanent value to the industries of the country than an extensive coal-field."

WATER POWER IN USE.

So many companies are already making use of water power that only a few examples can be given. In Sault Ste. Marie the largest pulp mill in Canada and a number of important industries are operated by electricity developed at the local rapids. One hundred and seventy-five thousand horsepower has been developed thus far. At Rat Portage, 100 miles east of Winnipeg, a dam across the Winnipeg River gives a head of twenty feet with a storage area—the Lake of the Woods—of about 2,000 square miles. In time, not only Rat Portage and its mills, but Winnipeg and other places, with their industries, will be supplied with power from these works, which have a capacity of about 30,000 horsepower.

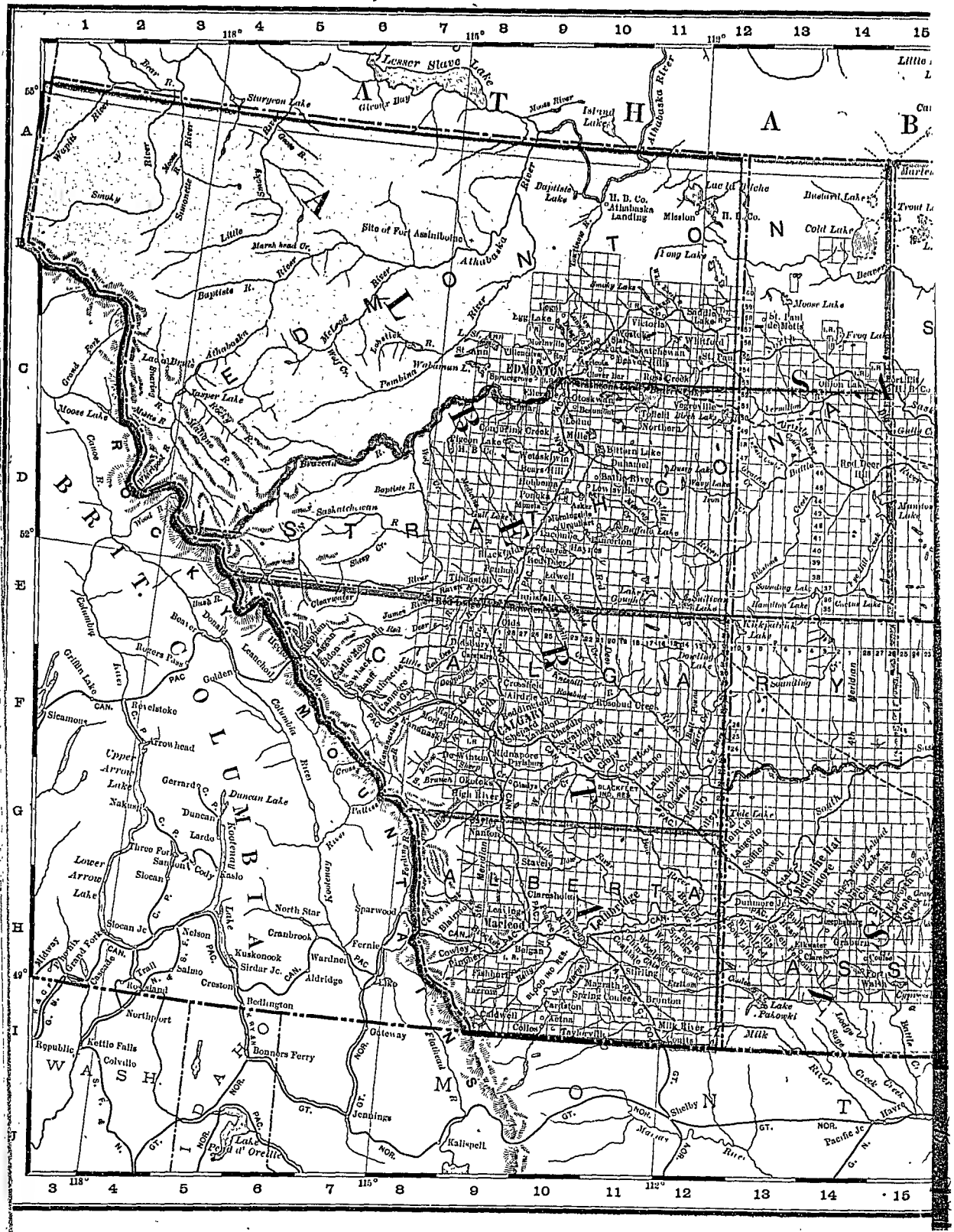
At Niagara Falls extensive power companies and many large chemical industries have been established, with an aggregate capital of $20,000,000. Up to 1903 about $3,000,000 had been expended by three companies that have franchises for power development. The completion of works to produce the full power authorized—425,000 horsepower—will involve an additional expenditure of $17,000,000, making the total invested capital $20,000,000. Great tunnels have been blasted through the solid rock under the river bed and along the shore, but the volume of water is so enormous that the quantity diverted has produced no visible effect.

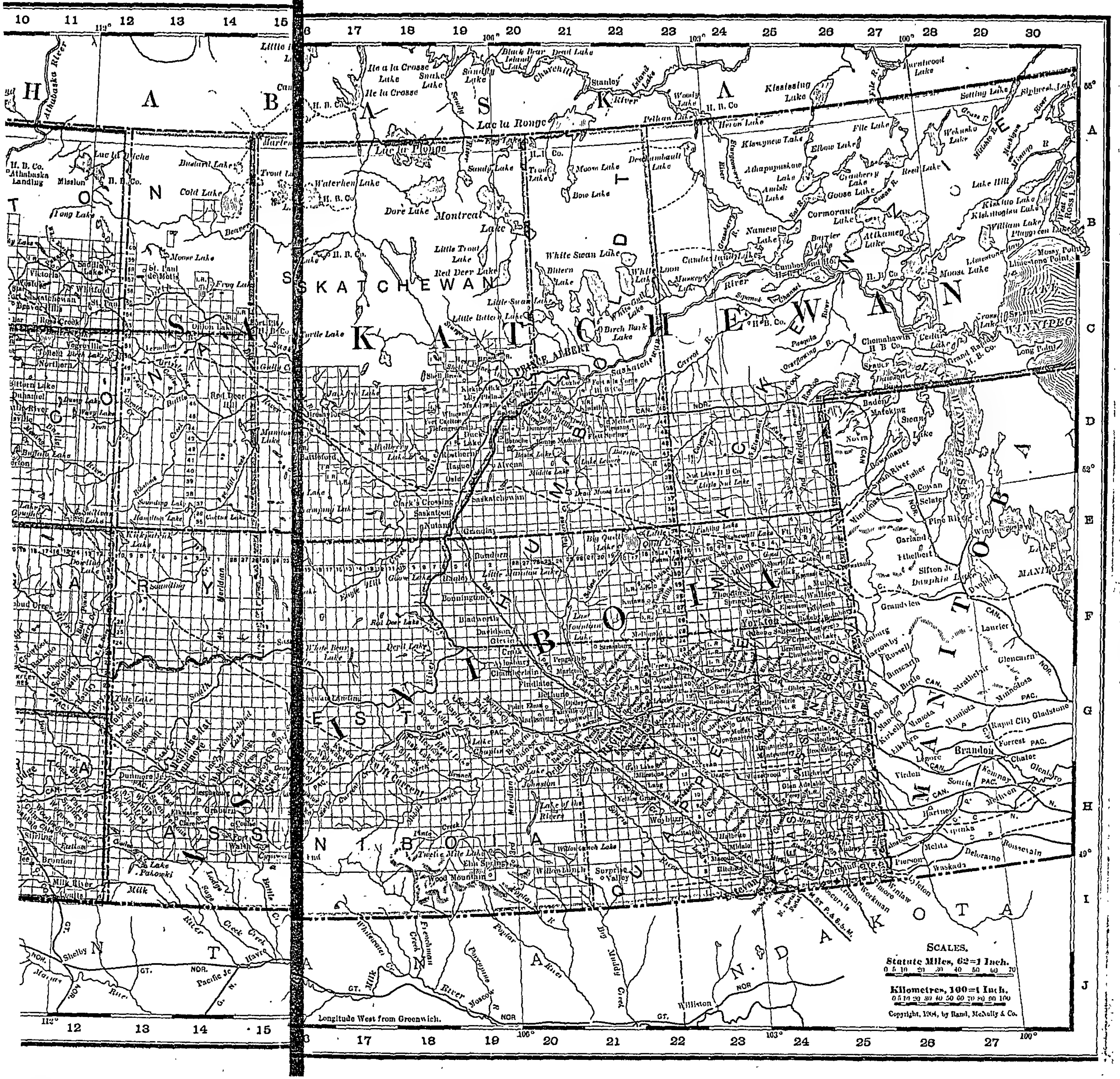
Large electrical works have also been constructed at the Lachine Rapids just above Montreal and at Chambly on the Richelieu River. These plants supply electricity for the operation of the street railway and for domestic and street lighting in Montreal. The streets of Quebec are lighted and the Quebec street railway operated by electricity developed at Montmorency Falls. Thirty thousand horsepower has been developed at Shawenegan Falls, on the River St. Maurice. The Chaudière at Ottawa, with a fall of about forty feet at low water, has been used for many years for driving mills, pumping the city water supply, and generating electricity for lighting and for operating the street railway. Eight thousand horsepower has been developed here, while another 1,000 horsepower has been developed at rapids five miles above the city. Twenty-seven miles farther up, at the Chats Falls, there are magnificent water powers. Within a radius of fifty miles from Ottawa, the capital of the Dominion, there is an available water-power energy equivalent to 900,000 horsepower.

In Northern British Columbia and in Yukon, water power is used to wash the gravel in the placer mines. When "hydraulicking" a bank of gold-bearing gravel, a jet of water under the enormous pressure of, say, 200 feet, is thrown upon the bank, tearing it away and washing the gravel down into the sluices.

These instances are only examples of the water powers abounding in Canada. It is estimated that the St. Lawrence system places 10,000,000 horsepower at the disposal of Canadian industry. The power at Niagara Falls is estimated at 5,500,000 horsepower.

In Switzerland water power is called "white coal." Canada's supply of "white coal" is not equalled by that of any other country, and is inexhaustible. As soon as cheaper methods of transmitting electricity have been perfected, the utility of Canada's running waters will be indefinitely increased.

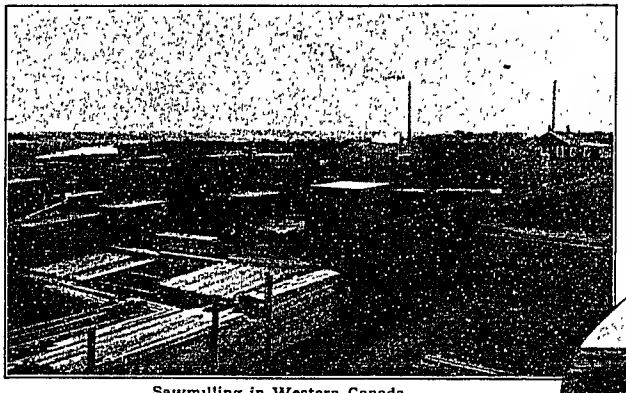

ALBERTA
SASKATCHEWAN
BRITISH COLUMBIA
EDMONTON
Lesser Slave Lake
Athabaska River
Peace River
Saskatchewan
Battle River
Red Deer River
Bow River
Columbia River
Kootenay River
Flathead R.
Milk River
Lake Pakowki
Cypress Hills
Crowsnest Pass
Waterton Lakes
Kalispell
Bonners Ferry
Kettle Falls
Colville
Republic
Northport
Rossland
Trail
Creston
Nelson
Cranbrook
Fernie
Sparwood
Elko
Jaffray
Marysville
Wardner
Aldridge
Libby
Jennings
Gateway
Revelstoke
Arrowhead
Upper Arrow Lake
Lower Arrow Lake
Duncan Lake
Duncan
Lardo
Three Forks
Sandon
Cody
Kaslo
Slocan
Slocan Jc.
Nakusp
Gerrard
Sicamous
Golden
Donald
Beaver
Rogers Pass
Griffin Lake
Clearwater
Blue River
Albreda
Vavenby
Avola
Chu Chua
Barriere
Louis Creek
Kamloops
Savona
Ashcroft
Spences Bridge
Lytton
Boston Bar
Yale
Hope
Agassiz
Chilliwack
Mission
Sumas
Abbotsford
Cloverdale
Vancouver
New Westminster
Victoria
Nanaimo
Ladysmith
Duncan
Cowichan Lake
Alberni
Port Alberni
Courtenay
Comox
Campbell River
Quadra Island
Cortes Island
Texada Island
Powell River
Gibsons
Sechelt
Pender Island
Saltspring Island
Mayne Island
Galiano Island
Valdes Island
Gabriola Island
Lasqueti Island
Denman Island
Hornby Island
Vancouver Island
Queen Charlotte Islands
Graham Island
Moresby Island
Dixon Entrance
Hecate Strait
Queen Charlotte Sound
Goose Island
Sable Island
Scotch Creek
Salmon Arm
Sicamous
Enderby
Armstrong
Vernon
Okanagan Lake
Kelowna
Penticton
Summerland
Oliver
Osoyoos
Osoyoos Lake
Grand Forks
Midway
Greenwood
Phoenix
Boundary Falls
Rock Creek
Christina Lake
Nelson
Kaslo
New Denver
Silverton
Slocan
Slocan City
Rosebery
Nakusp
Arrowhead
Revelstoke
Glacier
Golden
Donald
Field
Yoho Park
Mount Robson
Mount Assiniboine
Mount Sir Donald
Mount Stephen
Mount Temple
Mount Lefroy
Mount Victoria
Lake Louise
Banff
Canmore
Exshaw
Morley
Calgary
Airdrie
Crossfield
Carstairs
Olds
Didsbury
Innisfail
Penhold
Red Deer
Lacombe
Ponoka
Wetaskiwin
Leduc
Strathcona
Fort Saskatchewan
Sherwood Park
St. Albert
Stony Plain
Spruce Grove
Edmonton
Beaverlodge
Grande Prairie
Wembley
Dunvegan
Peace River
Fairview
Hines Creek
Manning
Notikewin
Fort Vermilion
La Crete
High Level
Rainbow Lake
Zama
Keg River
Fort Vermilion
Fort Chipewyan
Lake Athabaska
Athabaska Landing
Lac la Biche
Cold Lake
Beaverlodge
Dunvegan
Fairview
Peace River
Manning
Notikewin
Fort Vermilion
La Crete
High Level
Rainbow Lake
Zama
Keg River
Fort Chipewyan
Lake Athabaska
Athabaska Landing
Lac la Biche
Cold Lake
Vermilion
Lloydminster
Wainwright
Battleford
North Battleford
Maidstone
Meadow Lake
Prince Albert
Shellbrook
Melfort
Tisdale
Nipawin
Hudson Bay
Carrot River
Melfort
Kamsack
Yorkton
Melville
Esterhazy
Moosomin
Whitewood
Broadview
Grenfell
Wolseley
Indian Head
Qu'Appelle
Fort Qu'Appelle
Regina
Moose Jaw
Swift Current
Maple Creek
Medicine Hat
Redcliff
Bow Island
Foremost
Cardston
Lethbridge
Coaldale
Taber
Vauxhall
Brooks
Gleichen
Strathmore
Okotoks
High River
Turner Valley
Black Diamond
Longview
Bragg Creek
Cochrane
Canmore
Banff
Lake Louise
Field
Golden
Revelstoke
Sicamous
Salmon Arm
Kamloops
Ashcroft
Lytton
Boston Bar
Yale
Hope
Agassiz
Chilliwack
Mission
Abbotsford
Sumas
Cloverdale
Vancouver
New Westminster
Victoria
Nanaimo
Ladysmith
Duncan
Cowichan Lake
Alberni
Port Alberni
Courtenay
Comox
Campbell River
Quadra Island
Cortes Island
Texada Island
Powell River
Gibsons
Sechelt
Pender Island
Saltspring Island
Mayne Island
Galiano Island
Valdes Island
Gabriola Island
Lasqueti Island
Denman Island
Hornby Island
Vancouver Island
Queen Charlotte Islands
Graham Island
Moresby Island
Dixon Entrance
Hecate Strait
Queen Charlotte Sound
Goose Island
Sable Island


ATHABASKA
SASKATCHEWAN
ALBERTA
ASSINIBOIA
MANITOBA
KEEWATIN
MONTANA
N. DAKOTA
LAKE WINNIPEG
LAKE MANITOBA
PRINCE ALBERT
Regina
Moose Jaw
Saskatoon
Yorkton
Brandon
Medicine Hat
Battleford
Lac la Ronge
Longitude West from Greenwich.
SCALES.
Statute Miles, 62=1 Inch.
0 5 10 20 30 40 50 60 70
Kilometres, 100=1 Inch.
0 5 10 20 30 40 50 60 70 80 90 100
Copyright, 1904, by Rand, McNally & Co.

XVIII.

Transportation.

Canada's railway mileage per head of population is greater than that of any other country. In actual mileage it is the eighth country in the world, having 19,000 miles of track, as compared with 22,100 miles in Great Britain. In 1902 the railways of Canada had a paid-up capital of $1,098,852,209; a train mileage of 55,729,856 miles; carried 20,679,794 passengers and 42,376,527 tons of freight; earned $83,666,503; expended $57,343,592, and owned 2,444 locomotives, 2,020 passenger cars, and 76,254 baggage and freight cars.



Sawmilling in Western Canada.

THE INTERCOLONIAL (GOVERNMENT) RAILWAY.

With the exception of the Intercolonial (1,333 miles) and the Prince Edward Island (211 miles), all railways in Canada are owned by private companies. The Intercolonial — the Government railway—traverses Nova Scotia, Eastern New Brunswick, Gaspé Peninsula, and the Valley of the St. Lawrence.

CANADIAN PACIFIC RAILWAY.

From St. John the Canadian Pacific Railway extends to Montreal and then on across the whole of Canada — passing through the western wheat fields — to Vancouver on the Pacific Coast. Many flourishing cities and towns are passed *en route*, and between Montreal and Vancouver there are over four hundred stations. These include Ottawa, the capital, Fort William, Port Arthur, Rat Portage, Winnipeg, Portage la Prairie, Brandon, Regina, Calgary, and many beautiful tourist resorts in the Rockies. The "C. P. R.," as it is popularly called, also runs from Quebec to Montreal and thence through Ontario, via Toronto. This system has a mileage of 7,434 miles and is the only transcontinental railway in America under a single management. As Canadian Pacific steamships ply between England and Canada on the east, and between Canada and Japan and China on the west, the system virtually extends from England to China.

GRAND TRUNK RAILWAY.

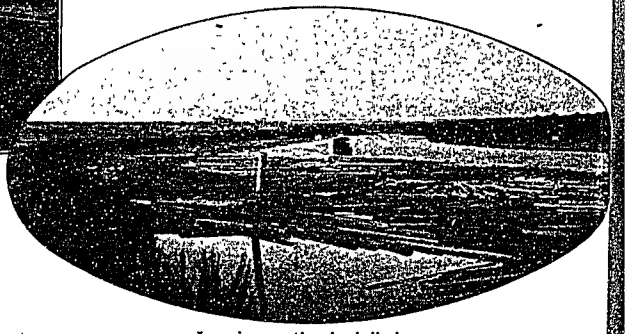
Another important railway, the Grand Trunk, runs westward from Portland (a United States port) on the Atlantic to Montreal, on through Ontario to Sarnia, and thence to Chicago, where it connects with principal railways of the Western States. It passes under the St. Clair River—the outlet of Lake Huron—by the famous St. Clair tunnel. With a mileage of 3,142 miles, the Grand Trunk reaches nearly all the cities and important towns in Ontario. It has a number of famous bridges, notably the Victoria Jubilee, at Montreal, spanning the St. Lawrence; the Niagara—the largest steel arch railway bridge in the world—just below the cataract of the same name, and the International, near Buffalo.

CANADIAN NORTHERN RAILWAY.

The traffic of the Northwest is so great that although the Canadian Pacific has many branch lines there is more than enough business for another railway. The Canadian Northern is building from Winnipeg to the Pacific, and will later be extended to an ocean port on the Atlantic, forming another transcontinental line. From Port Arthur, on Lake Superior, it extends to Winnipeg, and thence northwestward toward Edmonton. Upwards of 1,400 miles were in operation in 1903, and the company expects to reach Edmonton in 1904.

GRAND TRUNK PACIFIC RAILWAY.

A third transcontinental railway, the Grand Trunk Pacific, is under way. It will pass to the north of the Canadian Pacific and Canadian Northern railways, and is to be completed from Winnipeg to the Pacific before 1909. The Government of Canada will at the same time build the eastern section from Moncton through Central New Brunswick and Eastern Quebec to Quebec City, thence through Northern Quebec and "New Ontario" to Winnipeg, where it will join the western section, thus opening up much new, fertile country.



Logging on the Assiniboine.

ELECTRIC TRAM CARS.

All the larger cities of Canada now have electric street railways, and radial lines connect them with the neighbouring municipalities. There are 450 miles of single track and 200 miles of double track in operation.

STEAMSHIPS.

There are several Canadian trans-Atlantic steamship lines — notably the Allan line (which, including two steamers now building, will shortly have a fleet of thirty vessels, aggregating 158,000 tons), the Dominion line, and the Canadian Pacific line, besides several lines of freight steamers. There are lines to ports on the Gulf of St. Lawrence and the Bay of Fundy, to the United States, and to the West Indies. On the Pacific, the Canadian Pacific steamers ply to China, Japan, and Australia, and, with other lines, give an excellent service between Puget Sound (British Columbia) and Alaskan ports. There are also important lines of steamers on the St. John, St. Lawrence, Saguenay, Ottawa, and Yukon rivers, on the Great Lakes, on Lake Winnipeg, and on the lakes of Southern British Columbia.

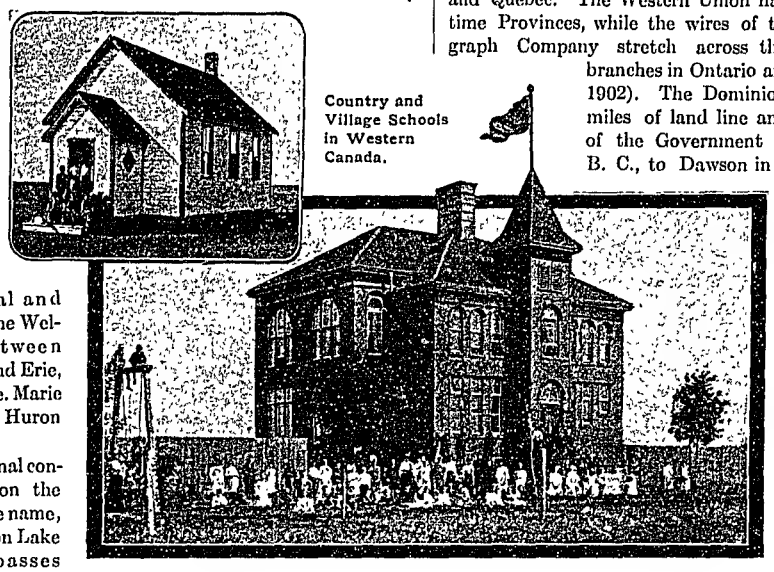
ATLANTIC AND PACIFIC CABLES.

The first cable in America was one between New Brunswick and Prince Edward Island (1852). The first cable across the Atlantic was laid in 1858 between Ireland and Newfoundland, but it was not a commercial success until 1866. Now there are fourteen cables in the North Atlantic, eleven of them landing at Newfoundland or Nova Scotia. From the initial rate of $5 a word the commercial rate has been gradually reduced to the present figure, 25 cents a word.

As a result of the Colonial Conference in 1887, an agreement for the construction and maintenance of a trans-Pacific cable was entered into by Great Britain, Canada, Australia, and New Zealand. This cable, which was laid in September and October, 1902, starts at Vancouver Island, runs 3,653 miles to Fanning Island—the longest continuous cable in the world—thence 2,181 miles to Fiji, thence 1,019 miles to Norfolk Island, where it divides, one line extending to Brisbane, and the other to New Zealand. The total length, including the two branches from Norfolk Island, is 7,693 miles.

CANALS AND CANAL TRAFFIC.

The magnificent natural highway of the St. Lawrence is the greatest of its kind in any country. In order to facilitate transportation, canals have been built wherever the rapids obstruct navigation.



Country and Village Schools in Western Canada.

There are six canals between Montreal and Lake Ontario, the Welland Canal between Lakes Ontario and Erie, and the Sault Ste. Marie between Lakes Huron and Superior.

The Rideau Canal connects Ottawa, on the river of the same name, with Kingston, on Lake Ontario. It passes through a number of picturesque lakes and through the Rideau and Cataraqui rivers.

A third system, called the Trent Valley, is now under construction, and will, when completed, connect the eastern portion of Lake Ontario with Georgian Bay.

The channel of the St. Lawrence has been deepened so as to allow the largest ocean steamers to sail up to Montreal. Above Montreal, vessels of fourteen feet draught can ascend to Lake Erie, and from Lake Erie to Lake Superior twenty feet of water is available. By this route a vessel can load at an upper lake port to over fourteen feet, lighter to this draught at the east end of Lake Erie, and carry the remainder of her cargo to Montreal, 1,230 miles from Fort William.

The traffic through the canals is steadily growing. In 1901 26,494 vessels with a tonnage of 6,462,538 tons and carrying 190,428 passengers and 5,665,259 tons of freight passed through the Canadian canals. In 1903 the canals were freed of tolls and as a result Montreal exported more grain than any other port in America. Although only open for part of the year, the tonnage passed through the Sault Ste. Marie canals (Canadian and United States) was more than double that through the Suez Canal. In 1902, 3,708 vessels with a tonnage of 11,248,413 tons passed through the Suez and 22,659 vessels with a tonnage of 31,955,582 tons through the Sault Ste. Marie canals.

RAILWAY CONDITIONS.

First-class railway fares are 3 cents per mile; but excursions at low rates are run every little while for both tourists and settlers. Dining cars are attached to the principal trains, and there are railway restaurants at important stations. The through coaches are converted at night into convenient sleeping cars.

TELEGRAPH AND TELEPHONE.

No place of importance in Canada can long do without the click of the telegraph to keep it in touch with the rest of the world. All the railways have their telegraph lines, and there are commercial and Government lines as well. The Great Northwestern Telegraph has 17,838 miles of line in Ontario and Quebec. The Western Union has 2,642 miles in the Maritime Provinces, while the wires of the Canadian Pacific Telegraph Company stretch across the continent and include branches in Ontario and Quebec (9,736 miles in 1902). The Dominion owns and operates 5,481 miles of land line and 275 miles of cable. One of the Government lines runs from Ashcroft, B. C., to Dawson in Yukon (1,826 miles). In 1902 there were 35,972 miles of telegraph line (including 336 miles of cable) in Canada, as against 47,786 in Great Britain.

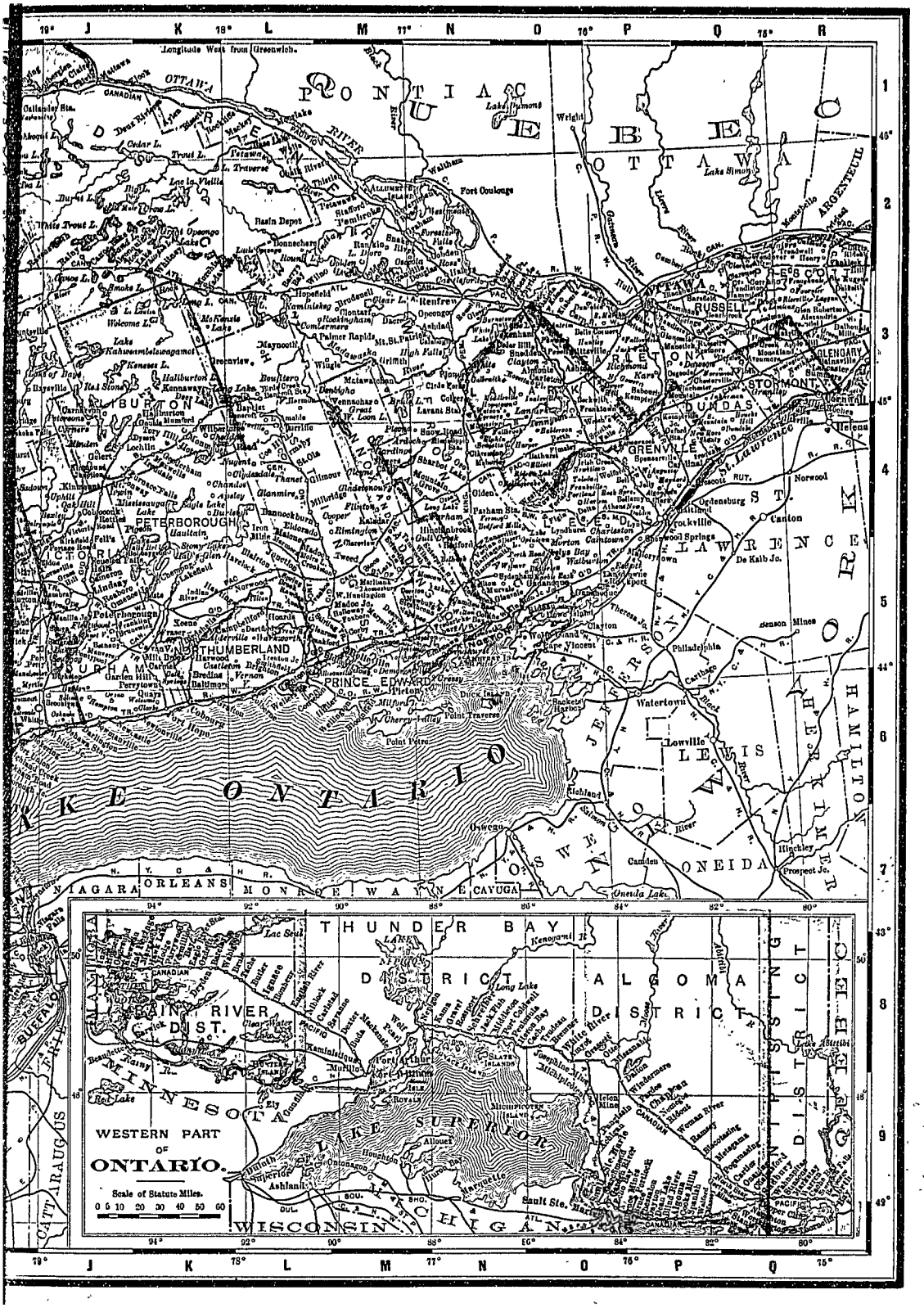
The telephone has spread through all the more settled parts of Canada. There are many local telephone companies in the rural districts, and in some cases the farmers unite in a co-operative telephone service. In 1902 there were fifty companies, with 1,816 offices and 15,362 miles of poles. The messages sent approximated 213,000,000.

CANADIAN POSTS.

In 1902 there were 9,958 post offices; total revenue, $5,158,408; expenditure, $5,240,784; amount of mail subsidies, $624,956; 213,628,000 letters and 26,343,000 post-cards were carried; 1,446,129 money orders for an aggregate of $23,549,402 were issued; there were 938 Government and post office savings banks, with 211,762 depositors and deposits aggregating $58,438,188. The cities have a free house delivery.

In 1898 an inter-imperial rate of postage of 2 cents per half ounce was established, the following portions of the British Empire joining in establishing this rate, viz.: Great Britain, Canada, Australia, New Zealand, British Africa, British West Indies, India, Gibraltar, Malta, and Hong Kong. The rate between Canada and the United States is 2 cents per half ounce, letter postage.


A B C D E F G H I
83° 82° 81° 80° 79°
2 3 45° 4 5 44° 6 7 43° 8 9 42°
ALGOMA
NIPISSING
PARRY SOUND
DISTRICT
MUSKOKA
GEORGIAN BAY
LAKE HURON
Owen Sound
GREY
SIMCOE
DUFFERIN
HURON
Goderich
Bad Axe
Palms
Sanilac Center
SANILAC
TUSCOLA
Port Huron
MACOMB
St. Clair
LAKE ST. CLAIR
DETROIT
LAKE ERIE
BUFFALO
Mayville
Chautauqua Lake
CHAUTAUQUA
ERIE
PA.
SCALES.
Statute Miles, 35=1 Inch.
0 5 10 20 30 40 50 60
Kilometres, 56=1 Inch.
0 5 10 20 30 40 50 60 70 80


Longitude West from Greenwich.
PONTIAC
BEAUCE
OTTAWA
RENFREW
RUSSELL
PRESCOTT
GLENGARY
STORMONT
DUNDAS
GRENVILLE
ST. LAWRENCE
LEEDS
LANARK
FRONTENAC
ADDINGTON
HASTINGS
PETERBOROUGH
VICTORIA
DURHAM
NORTHUMBERLAND
PRINCE EDWARD
ONTARIO
LAKE ONTARIO
JEFFERSON
LEWIS
HERKIMER
HAMILTON
ONEIDA
OSWEGO
CAYUGA
ONONDAGA
MONROE
WAYNE
ORLEANS
NIAGARA
HALIBURTON
NIPISSING
THUNDER BAY
DISTRICT
ALGOMA
RAINY RIVER DIST.
MINNESOTA
LAKE SUPERIOR
WESTERN PART OF ONTARIO.
Scale of Statute Miles.
0 5 10 20 30 40 50 60
WISCONSIN
MICHIGAN

As an evidence of the efficient administration of the Canadian post, the records show that out of 4,073,000 letters registered in 1902, fewer than eighty were lost, including losses due to fire, wreck, and all similar mishaps.

THE FOLLOWING FIGURES SHOW THE GROWTH OF THE POSTAL SERVICE IN THIRTY-ONE YEARS.

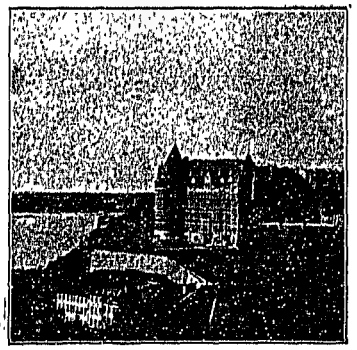
	Letters including post-cards posted	No. letters per capita
1871	27,050,000	7.69
1881	57,810,000	11.11
1891	118,275,000	20.22
1901	218,402,000	35.57
1902	239,071,000	38.15

XIX.

Government, Finance, Education.

The Dominion of Canada has a general Parliament, elected every five years, and each Province has also a legislature of its own to deal with Provincial affairs.

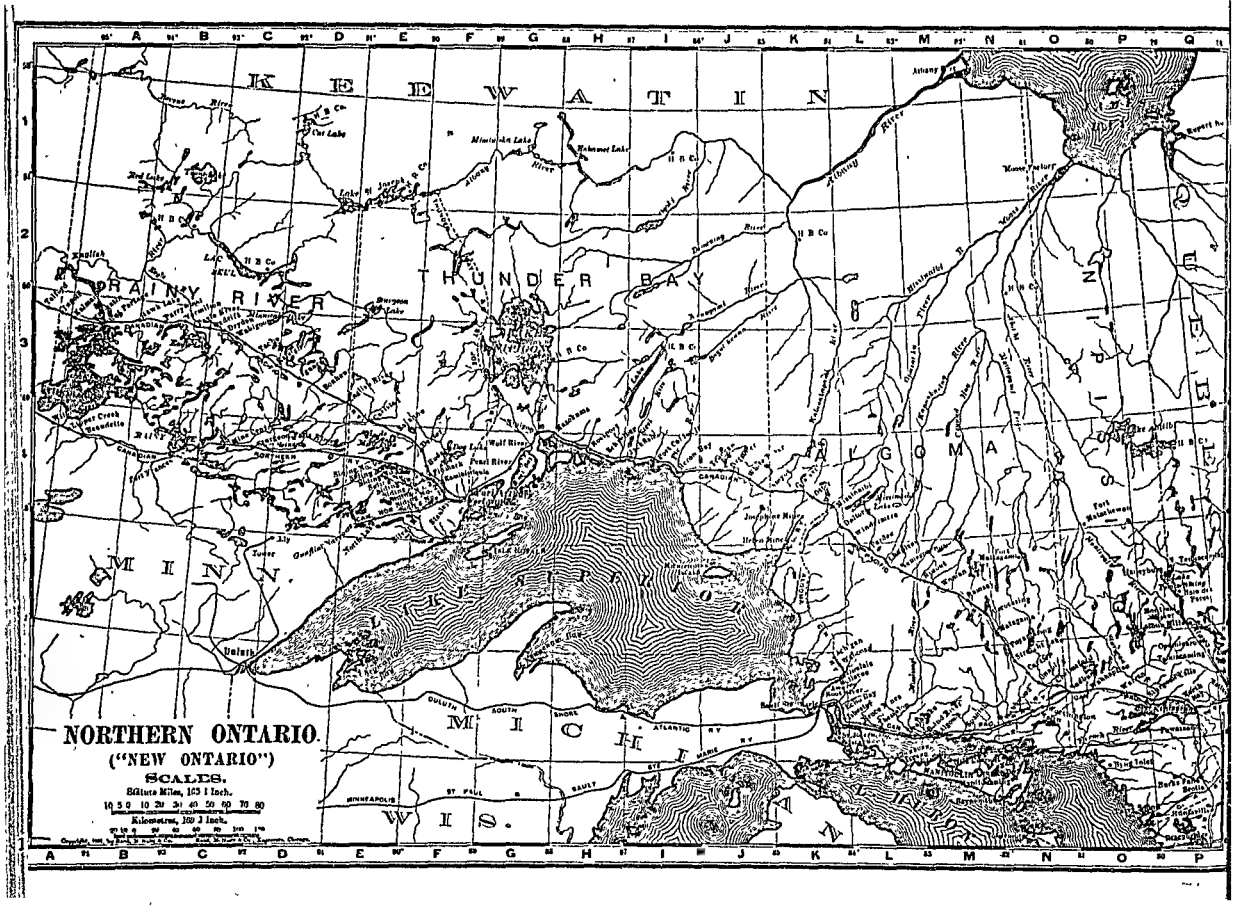
Those who planned the Canadian system of Government tried to follow closely that of the motherland. Corresponding to the British House of Lords and House of Commons, there are, in Canada, the Senate and the House of Commons. The Governor-General is appointed by the King, on the advice of his Ministers, and represents the Crown. The Senators are appointed by the Governor-General, on the recommendation of his Ministers, and the members of the House of Commons are elected by direct popular vote. In Canada nearly every man over twenty-one years old has a vote. The Governor-General is advised by a Cabinet chosen from the political party that has a majority in the Commons. Thus Canada has both representative and responsible government.

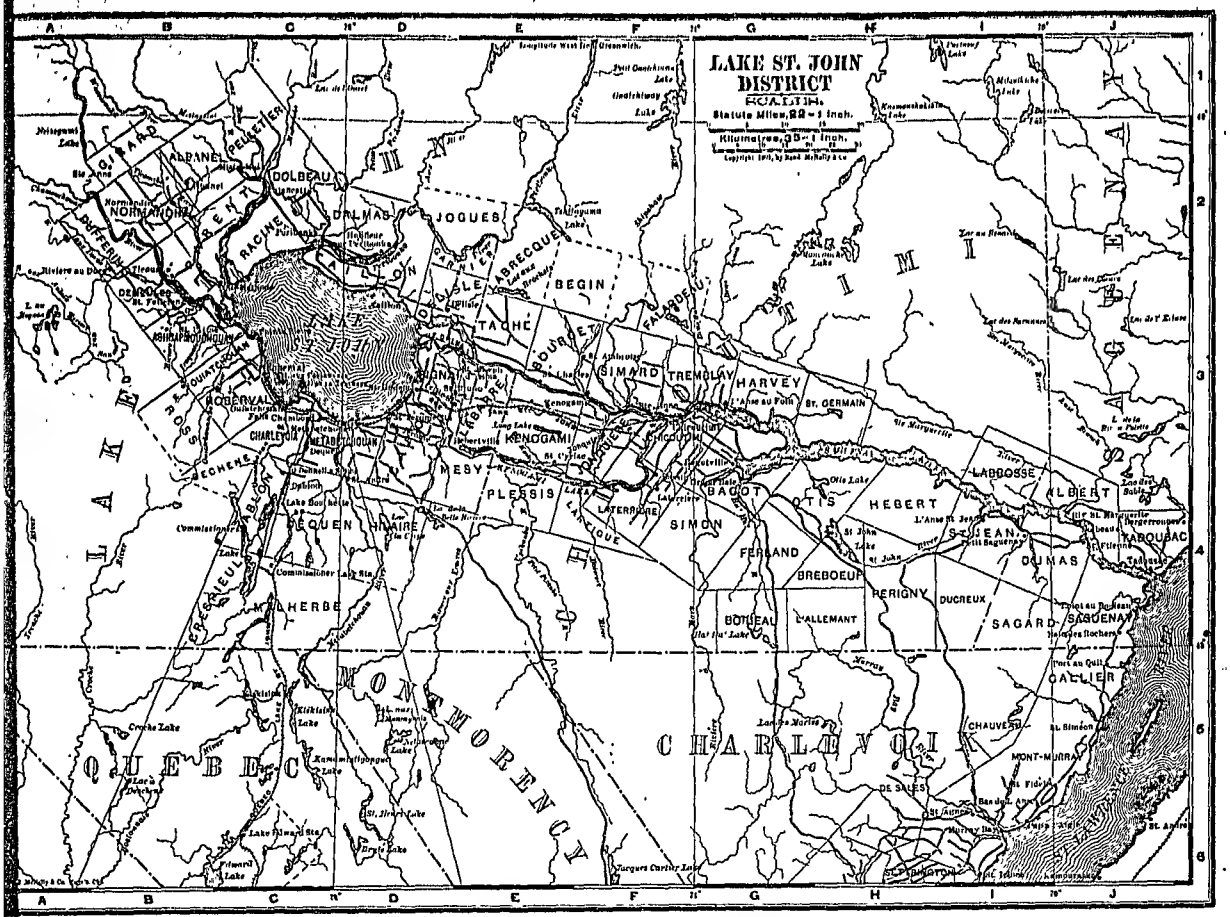


Chateau Frontenac, Quebec.

Although the territories of the North-west—Alberta, Saskatchewan, and Assiniboia—are not yet Provinces, they have a local legislature which meets at Regina.

In all matters affecting herself only Canada has full self-government, the union with Great Britain resting upon common interests and loyalty. British goods are accorded a preferential rate of duty to encourage the expansion of trade with the motherland.





BANKING IN THE DOMINION, 1903.

Number of chartered banks	33
Number of branches	1,020
Paid-up capital	$ 76,453,125
Reserve funds	47,761,536
Notes in circulation	60,244,072
Deposits	424,167,140
Discounts	472,019,689
Liabilities	507,527,550
Assets	641,543,226

The 11 clearing houses cleared $2,689,823,345 of which 40% was cleared in Montreal, 30% in Toronto, and 9% in Winnipeg.

CANADIAN MONEY.

A decimal currency has been adopted in Canada, the unit being the dollar, which is divided into 100 cents.

The chartered banks in Canada, like those in Scotland, are note-issuing institutions, with many branches in different parts of the country. For example, one Canadian bank with a paid-up capital of $8,700,000 has seventy-four branches. The notes are a first charge on the assets of the bank, and in addition are guaranteed by the other banks, thus giving the holders perfect security. The branch banks greatly facilitate business transactions, the head office transferring funds to the points where they are most needed, thus relieving financial strain, and employing profitably the resources of the bank.

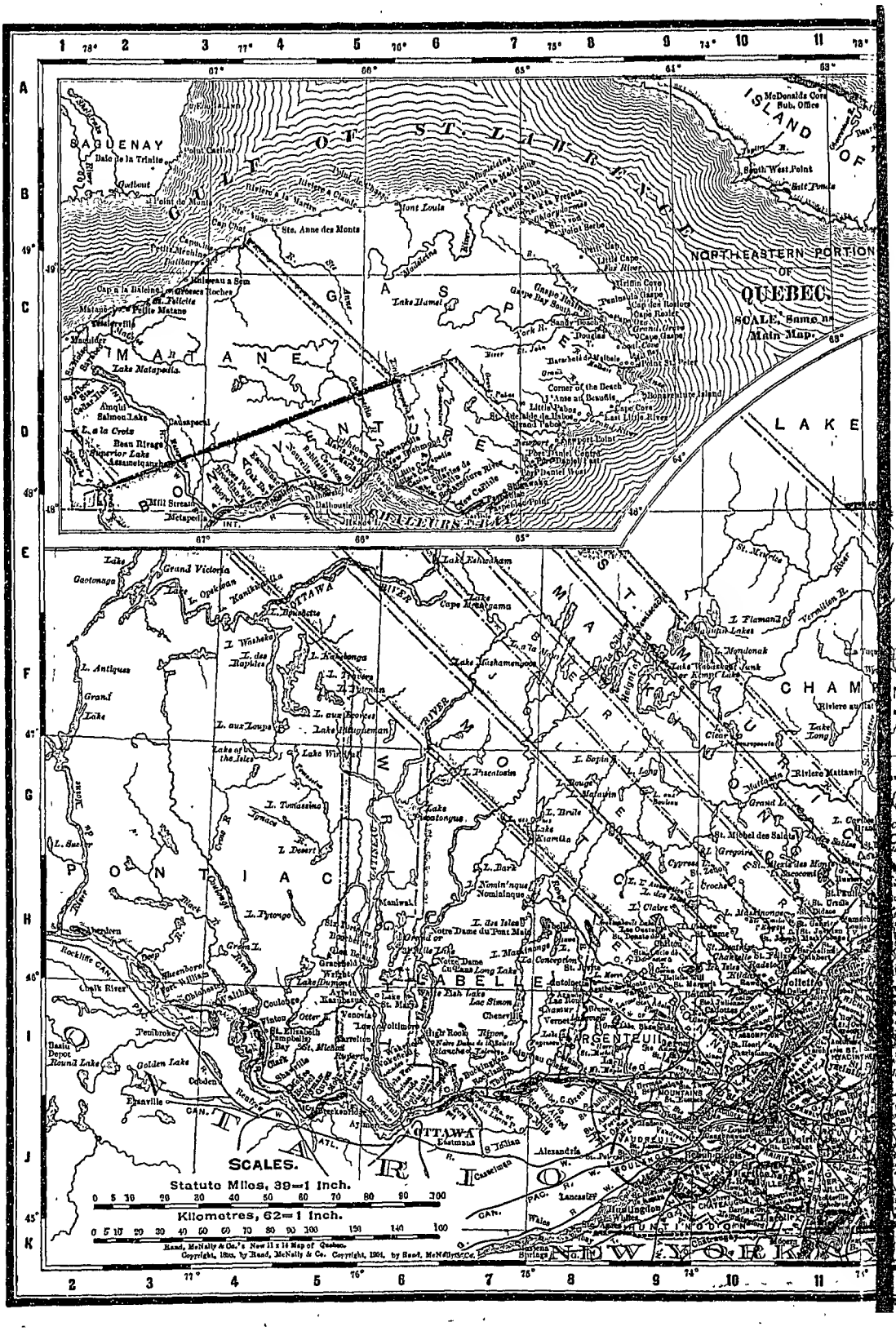
FREE SCHOOLS.

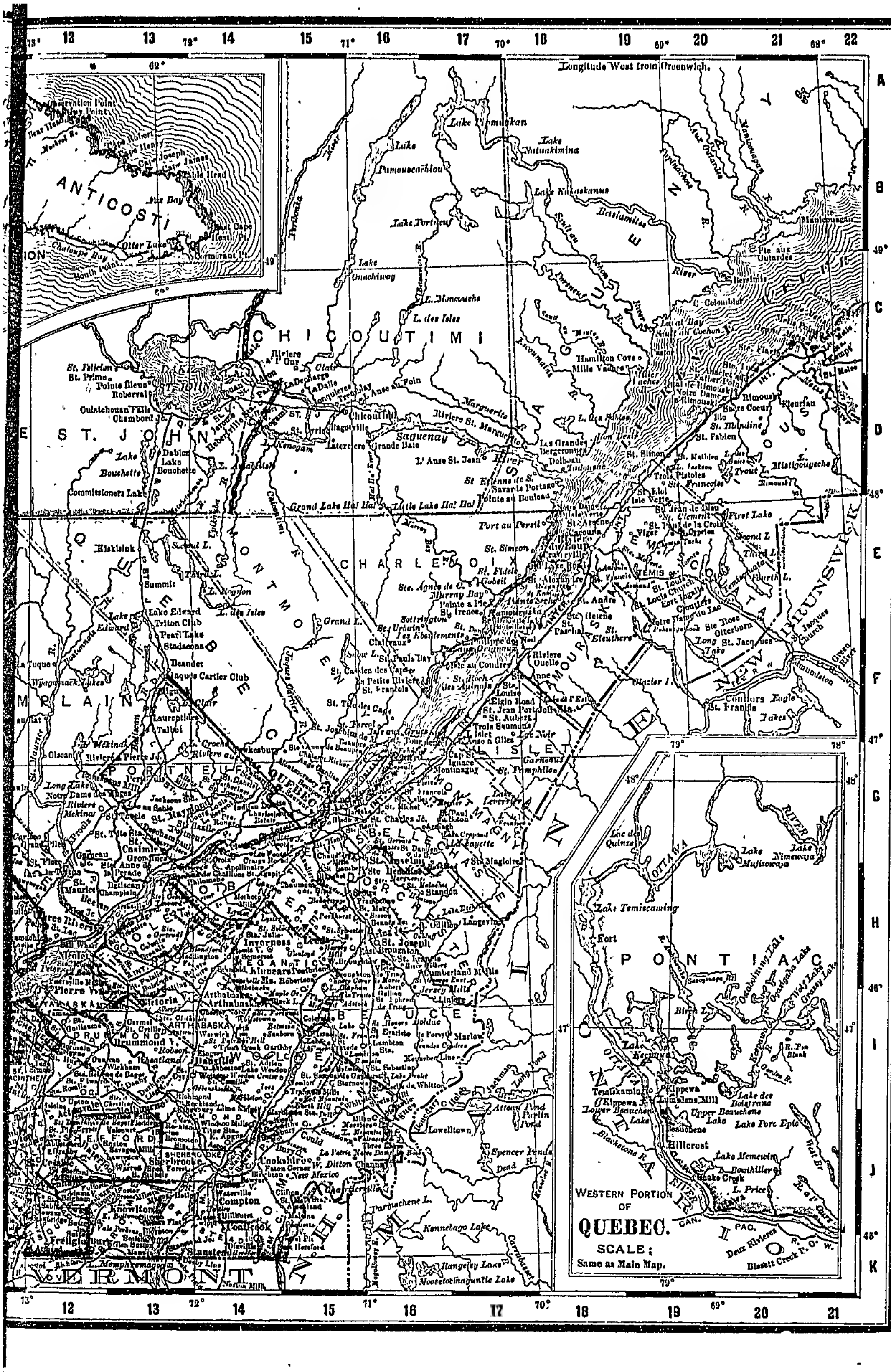
In Canada every boy and girl may go to an elementary school free of all charge for tuition fees. Every Province and settled Territory provides generously for schools. In the West a school district may comprise an area of not more than twenty-five square miles, and must contain a school population — children between the ages of five and twenty—of not fewer than ten.

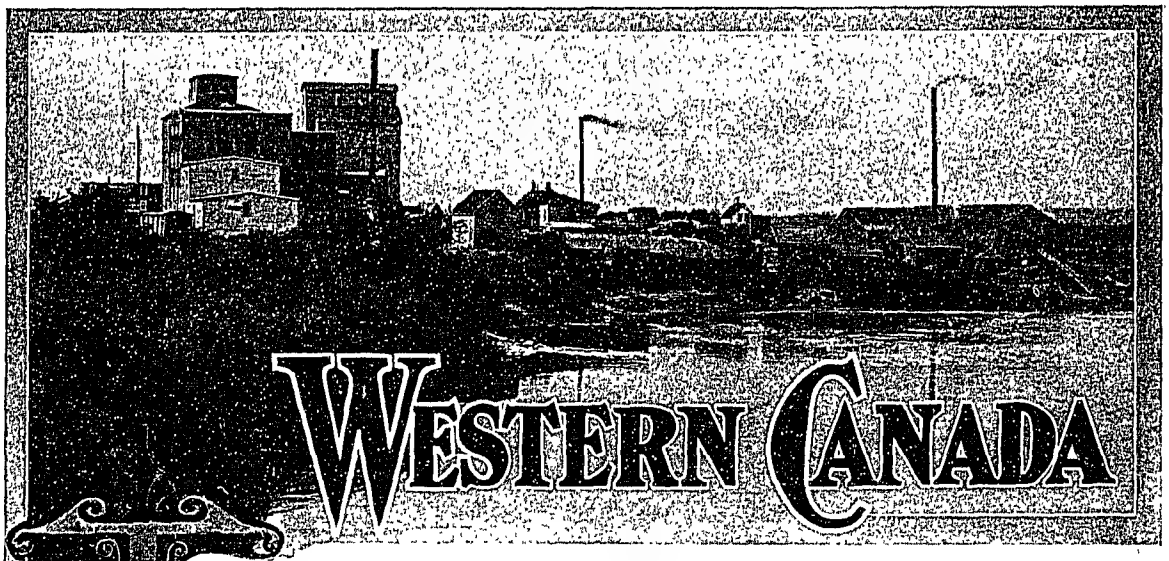
In 1902 there were 19,386 free schools in Canada, with 1,096,632 pupils and 28,699 teachers; a revenue of $11,790,320, and an expenditure of $10,787,957. Manitoba had 1,488 schools, with 1,869 teachers and 54,056 pupils, and the Territories had 640 schools, with 783 teachers and 27,441 pupils.

HIGH SCHOOLS AND UNIVERSITIES.

For the secondary schools a small fee is usually charged to supplement their revenues from municipal taxation and Government grants. In some of the older Provinces, especially in Ontario and Quebec, there are a number of large residential schools for boys, much like the great Public Schools of England, and many colleges for girls and young women. Several large universities carry on work of a higher grade, and some of them, notably the University of Toronto and McGill University of Montreal, have gained a high reputation for scientific work. All branches of instruction are provided for, and every year Canadian students cross the Atlantic to continue their studies in Great Britain and on the Continent.


NORTH-EASTERN PORTION OF QUEBEC.
SCALE, Same as Main Map.
SAGUENAY
ST. LAWRENCE
GASPE
MAGANE
ONTARIO
PONTIAC
ISABELLE
CHAMPLAIN
ARGENTEUIL
OTTAWA
Lake Matapedia
Lake Humel
Lake Temiscamingue
Lake Nipissing
Lake Timagami
Lake Wahnapitae
Lake Nipissing
Lake Temagami
Lake Kamaniskeg
Lake Muskamongus
Lake Manitou
Lake Nominingue
Lake Nominique
Lake Pimisi
Lake Nosbonsing
Lake Antiquas
Lake Grand
Lake Victoria
Lake Gastonaga
Lake Kamibonitia
Lake Opeongo
Lake Washeko
Lake Kakabonga
Lake Travers
Lake Timiskaming
Lake Mishamenoua
Lake Mondonak
Lake Tessalon
Lake Kimpt
Lake Long
Lake Placentosia
Lake Malavin
Lake Brule
Lake Kiamika
Lake Barr
Lake Simon
Lake Cheneville
Lake Round
Lake Golden
Lake Coulonge
Lake Otter
Lake Venosta
Lake Baskatong
Lake Cayamant
Lake Desert
Lake Pyrogue
Lake Tomassina
Lake Wahnapitae
Lake Timagami
Lake Temagami
Lake Nipissing
Lake Kamaniskeg
Lake Muskamongus
Lake Manitou
Lake Nominingue
Lake Nominique
Lake Pimisi
Lake Nosbonsing
Lake Antiquas
Lake Grand
Lake Victoria
Lake Gastonaga
Lake Kamibonitia
Lake Opeongo
Lake Washeko
Lake Kakabonga
Lake Travers
Lake Timiskaming
Lake Mishamenoua
Lake Mondonak
Lake Tessalon
Lake Kimpt
Lake Long
Lake Placentosia
Lake Malavin
Lake Brule
Lake Kiamika
Lake Barr
Lake Simon
Lake Cheneville
Lake Round
Lake Golden
Lake Coulonge
Lake Otter
Lake Venosta
Lake Baskatong
Lake Cayamant
Lake Desert
Lake Pyrogue
Lake Tomassina
SCALES.
Statute Miles, 39=1 Inch.
0 5 10 20 30 40 50 60 70 80 90 100
Kilometres, 62=1 Inch.
0 5 10 20 30 40 50 60 70 80 90 100 150 140 100
Rand, McNally & Co.'s New 11 x 16 Map of Quebec.
Copyright, 1899, by Rand, McNally & Co. Copyright, 1901, by Rand, McNally & Co.
NEW YORK


Longitude West from Greenwich.
ANTICOSTI
CHICOUTIMI
ST. JOHN
QUEBEC
MONTMORENCY
CHARLEVOIX
PORTNEUF
L'ISLET
KAMOURASKA
TEMISCOUATA
NEW BRUNSWICK
BELLECHASSE
MONTMAGNY
DORCHESTER
BEAUCE
MEGANTIC
ARTHABASKA
DRUMMOND
SHERBROOKE
COMPTON
VERMONT
PONTIAC
Lake Temiscaming
Saguenay
WESTERN PORTION OF QUEBEC.
SCALE; Same as Main Map.
A
B
C
D
E
F
G
H
I
J
K



THESE pages of The Geography of Canada deal with that portion of Canada known as "Western Canada." Although the Department of the Interior, through its immigration branch, has availed itself of every opportunity to make known to the world the advantages that are offered to those who wish to make new homes for themselves, there is still a great demand for information of an authentic character. This it is the wish of the Government of the Dominion of Canada to supply. To render advice to prospective settlers and make known the possibilities of Canada, the Canadian Government has established agencies in many of the principal cities of the Western United States as well as in Great Britain and Ireland and on the Continent.

Canada is to-day the attractive point for a greater number of desirable settlers than any other country on the face of the globe, Western Canada's magnificent area of grain and grazing lands, admittedly the most productive on the continent, being the strongest inducement to colonization. During the past seven years the rate of immigration has increased marvellously from year to year. During the year ending December 31, 1903, the number of declared settlers was about 135,000, a far greater increase over the previous year than was even the immigration of 1902 over that of 1901. In the past seven years, the prairies of Western Canada have added to their population about 700,000 souls.

The prairie of to-day presents a scene vastly different from that of a few years ago. Then one might travel hundreds of miles without seeing more than a very few residences; to-day these same prairies are everywhere dotted with new homes, and yet there remain, still obtainable, scores of thousands of the free homesteads offered as an inducement by the Government to actual settlers. Considering that Western Canada is bounded by Lake Superior on the east, and the Rocky Mountains on the west, and that from the 49th parallel at the south it extends northward nearly five hundred miles, a slight conception may be had of the vastness of the region to which settlement is invited. The marked increase that settlement has made from year to year is the best evidence that can be offered that the country has been found to meet the varied requirements of the settler.

Ordinary common sense prompts the idea that in a country over one thousand miles in length and nearly five hundred in width there will be found many different conditions of climate, soil, and topography. This is the case in Western Canada, and while, in a general way, there may be dissimilarities, yet there is uniformity in the one essential, that all parts offer inducements, according to the desire of the settler.

For the sake of clearness, it is well to bear in mind that "Western Canada" comprises the Province of Manitoba, and the territorial districts of Assiniboia, Saskatchewan, and Alberta. Athabaska and some of the northern districts might be included, but as these are in a measure inaccessible to settlement at the present time, it is not thought desirable to deal with them further than by passing reference. It will suffice to state that even in these northern districts excellent yields of grain have been produced and successfully harvested—striking collateral evidence of the favouring climatic conditions in the districts farther south.

The Province of Manitoba.

Manitoba was the sphere of the pioneering efforts in Western Canada's immigration, and its people may be proud of what it has accomplished by way of example for the three territorial districts to the west, where equal success is rewarding the efforts of the tillers of the soil. It is not a quarter of a century since the Province had only 66,000 inhabitants. To-day its population exceeds 350,000. For nearly a century agriculture has been carried on, dating back to 1812, when Lord Selkirk planted the first colony, entering the country by way of Hudson Bay. In 1870, when Manitoba entered the Confederation, its agricultural production found no place in the records. In 1881 it was credited as producing 1,000,000 bushels of wheat on an acreage of 51,300, and 1,270,268 bushels of oats. As will be seen by the diagrams elsewhere, the acreage of Manitoba in 1902 was 3,189,015; 2,039,940 of which was in wheat, producing a yield of about 53,000,000 bushels. Correspondingly large increases were seen in oats, barley, flax, roots, and potatoes. The acreage under crop in 1903 was 3,757,173, with 2,442,873 acres in wheat. The average wheat yield per acre in 1903 was 16.42 bushels, about ten bushels less per acre than in the previous

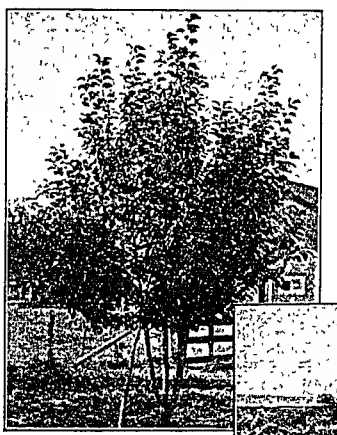
year, but the higher price made the crop of 1903 as profitable as that of 1902. The rapid expansion of the Province is mirrored in these figures.

There was also a satisfactory growth of the dairying industry, and increasing interest was manifested in mixed farming, largely due to growth in population.

It is worthy of note that during the winter of 1902-3, 13,986 head of cattle were fattened, and that the number of milch cows in the Province was 126,846. The large number of milch cows is attributable to the growing interest taken in dairying, which has proved to be wonderfully profitable.

THE CITY OF WINNIPEG.

Probably no better idea of the prosperity of the country can be obtained than may be gained by a visit to the city of Winnipeg, to which it seems impossible for writers to do justice in ordinary terms of praise. This capital, often spoken of as the "Chicago of Canada," certainly occupies a prominent position amongst the cities of the continent. It is practically the gateway of the West, and a metropolis of over 70,000 inhabitants—in all respects a city of magnificent promise, that gives evidence of a strong and strenuous life. In commercial possibilities Winnipeg is great. It has electric railways, wide streets, well-kept boulevards, fine pavements, and the best of other improvements. During the past year no less than $5,000,000 worth of buildings were erected, many of them such as would do credit to Montreal. The jobbing interests and the mercantile business enterprises are all flourishing.



Heavily Laden Appletree in Manitoba.

A LAND OF GREAT POSSIBILITIES.

It is a difficult matter to draw faithful pen pictures of this magnificent agricultural country; words but faintly describe it. A personal visit is the only means of securing a true perspective. On all sides and as far as the eye can reach are great fields of wheat, oats, and barley. Prosperous-looking farm houses are everywhere, with great lines of elevators fringing the horizon. This is literally a land of promise to the farmer, and it is no cause for wonder that it is filling up with men who realize the possibilities it offers.

A PROLIFIC COUNTRY.

"A field of wheat at the Van Horne farm, East Selkirk, has been the cause of a great deal of admiration. It was just at the station, and in view of hundreds of people daily. Those who saw the field after it was cut were not backward in saying that the shocks were the largest of any they had ever seen, and that was saying a great deal in this prolific country. A few days ago this field was threshed out, and the yield from the machine was forty-eight bushels to the acre."—*Newspaper Extract.*

A gentleman thoroughly conversant with conditions in Manitoba for many years recently said:

"The rich soil and favourable climatic conditions are here as a bank account, upon which present farmers in the Province are not yet drawing more than a portion of the interest accruing from year to year. Only when 20,000,000 acres of our heritage are actually cropped shall we realize what the account to our credit is; 4,000,000 acres are now under cultivation. These lands can still be purchased at from $5 to $40 an acre. Resident farmers, whose lands are valued to-day at from $15 to $40 an acre, are realizing a revenue from the same equal to 7 per cent on an investment of more than double this value."

PROFITS TO BE REALIZED.

Areas under wheat in 1902 gave a clear profit of over $6 an acre. The average yield was 26 bushels, which at 55 cents per bushel gave a return of $14.30 per acre. It is conceded that all the labor of ploughing, seeding, harvesting, and marketing can be hired done at $7.50 per acre. Even allowing $8, there is a balance of $6.30 clear profit. This means a revenue of 7 per cent on land worth $90 per acre. Farmers who make this profit can rest assured that their lands will rise in value from year to year, a fact which sets a premium on farsightedness and enterprise as well as upon industry.

The products of the farms—wheat, coarse grains, meat, dairy products, poultry, and eggs—are all tangible commodities that are required to supply daily wants. Prices of these may fluctuate, but never can a farmer become ruinously overstocked with any one or more of them.

MIXED FARMING PAYS.

While it is grain-growing that has given Manitoba agriculture so well-deserved a prominence in the eyes of the world, the leaven of mixed farming is gradually but surely permeating the minds of farmers. The general trend of surplus capital and energy is in that direction. If Ontario and the States of the American Union, which at one time were noted for their grain-growing, have changed off to stock breeding and dairying, and if their lands still are valued at from $60 to $100 per acre, there is no reason why Western Canada lands may not be equally valuable in the production of such products.

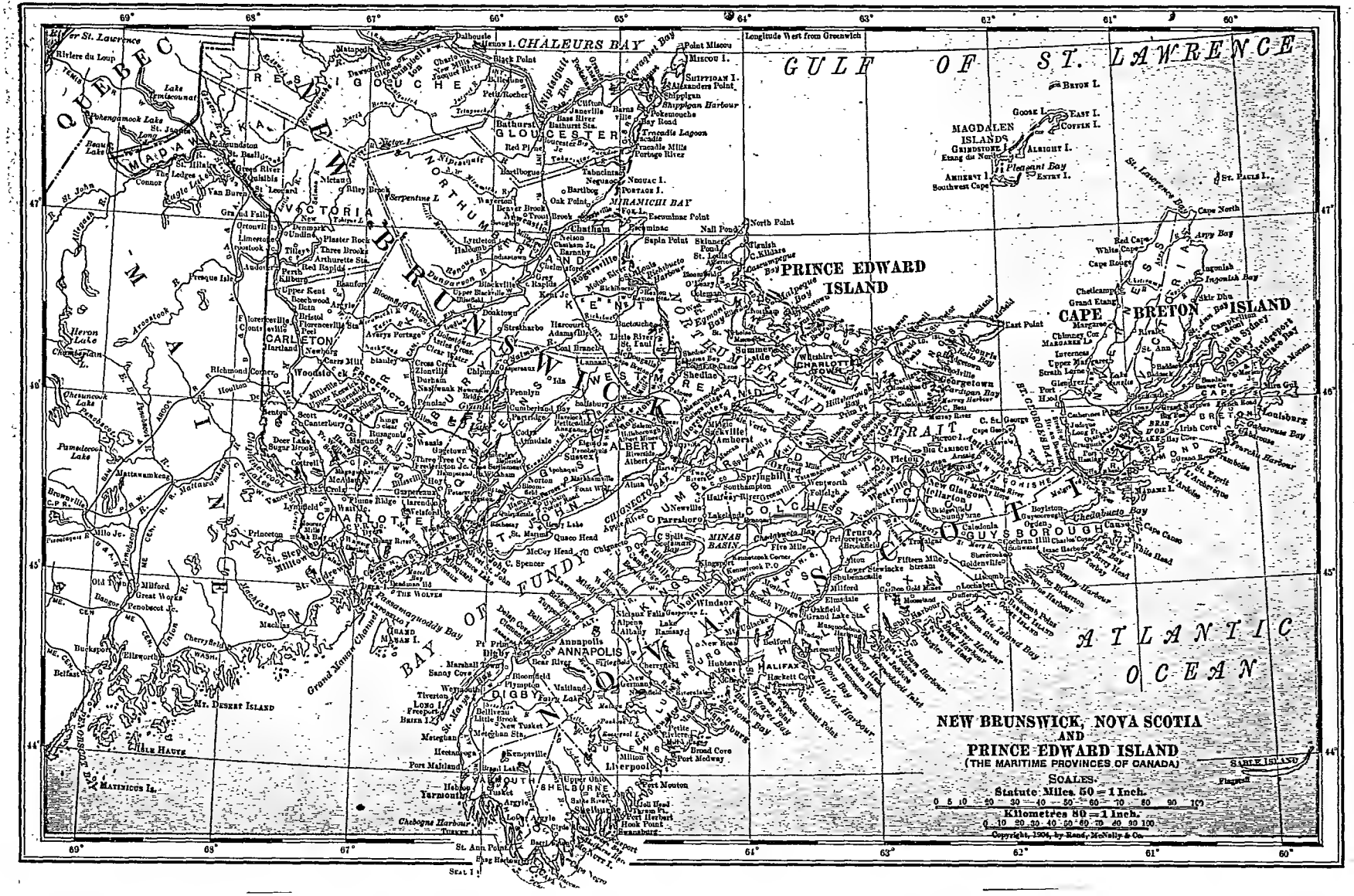
Corner of a Manitoba Vegetable Garden.

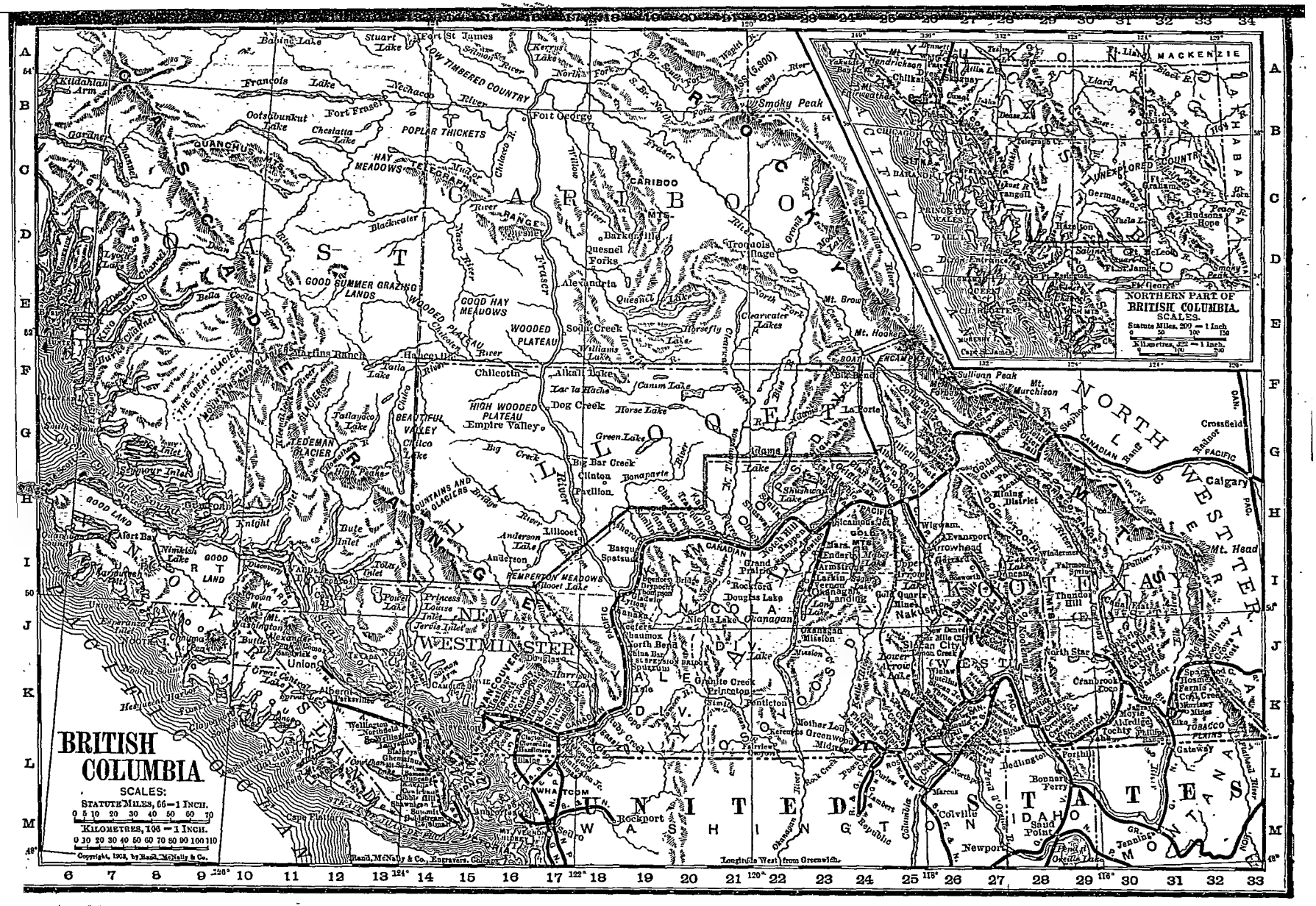
STOCKERS.

The ever-increasing demand for stockers to be put upon ranches in the Territories gives an impetus to cattle-raising in the Province. Manitoba farmers provide the necessary shelter for wintering cattle, and the immense crop of coarse grains and fodder so easily raised supplies the necessary food for all stock under shelter. There is no doubt but that Manitoba for many years will be the recruiting ground to supply ranches with stockers, and it is only a question of time until Manitoba farmers, with an enlarged supply of farm help, will direct their attention more and more to the winter-feeding of fat cattle

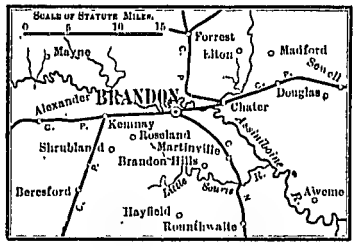
THE HOMESEEKER'S OPPORTUNITY.

Manitoba's population is largely English-speaking. As a rule, people with means, and those satisfied with existing conditions, do not move; and it follows that the settlers of Manitoba have not brought large bank accounts with them. The man who has


GULF OF ST. LAWRENCE
ATLANTIC OCEAN
BAY OF FUNDY
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
NEW BRUNSWICK
NOVA SCOTIA
CHALEURS BAY
MIRAMICHI BAY
MINAS BASIN
NORTHUMBERLAND STRAIT
MAGDALEN ISLANDS
Longitude West from Greenwich
NEW BRUNSWICK, NOVA SCOTIA AND PRINCE EDWARD ISLAND
(THE MARITIME PROVINCES OF CANADA)
SCALES.
Statute Miles. 50 = 1 Inch.
0 5 10 20 30 40 50 60 70 80 90 100
Kilometres 80 = 1 Inch.
0 10 20 30 40 50 60 70 80 90 100
Copyright, 1904, by Rand, McNally & Co.


BRITISH COLUMBIA
SCALES:
STATUTE MILES, 66 = 1 INCH.
0 5 10 20 30 40 50 60 70
KILOMETRES, 106 = 1 INCH.
0 10 20 30 40 50 60 70 80 90 100 110
Copyright, 1903, by Rand, McNally & Co.
Rand, McNally & Co., Engravers, Chicago.
Longitude West from Greenwich.
NORTHERN PART OF BRITISH COLUMBIA.
SCALES.
Statute Miles, 200 = 1 Inch.
Kilometres, 320 = 1 Inch.
Stuart Lake
Fort St James
Fort Fraser
Fort George
Francois Lake
Nechaco River
Smoky Peak
POPLAR THICKETS
HAY MEADOWS
GOOD SUMMER GRAZING LANDS
GOOD HAY MEADOWS
WOODED PLATEAU
HIGH WOODED PLATEAU
BEAUTIFUL VALLEY
Empire Valley
Chilcotin
Alkali Lake
Dog Creek
Horse Lake
Green Lake
Big Bar Creek
Clinton
Bonaparte
Lillooet
Anderson Lake
Pavilion
Alexandria
Quesnel Forks
Barkerville
Soda Creek
Williams Lake
Horsefly
Quesnel Lake
Troquois Village
Mt. Brown
Mt. Hooker
Yellowhead Pass
Mt. Murchison
Sullivan Peak
La Porte
Calgary
Crossfield
Mt. Head
Fort Steele
Cranbrook
Fernie
Elko
Gateway
Porthill
Bonners Ferry
Newport
Colville
Spokane
Rockport
Wenatchee
Okanogan
Penticton
Princeton
Granite Creek
Nicola Lake
Douglas Lake
Grand Prairie
Kamloops
Shuswap Lake
Revelstoke
Arrowhead
Evanmore
Wigwam
Golden
Donald
Field
Laggan
Banff
Canmore
Lac la Hache
Canim Lake
Tatlayoko Lake
Chilco Lake
Tatla Lake
Martins Ranch
Hanceville
Alexandria
Quesnel
Soda Creek
Williams Lake
Horsefly
Quesnel Lake
Troquois Village
Mt. Brown
Mt. Hooker
Yellowhead Pass
Mt. Murchison
Sullivan Peak
La Porte
Calgary
Crossfield
Mt. Head
Fort Steele
Cranbrook
Fernie
Elko
Gateway
Porthill
Bonners Ferry
Newport
Colville
Spokane
Rockport
Wenatchee
Okanogan
Penticton
Princeton
Granite Creek
Nicola Lake
Douglas Lake
Grand Prairie
Kamloops
Shuswap Lake
Revelstoke
Arrowhead
Evanmore
Wigwam
Golden
Donald
Field
Laggan
Banff
Canmore
Lac la Hache
Canim Lake
Tatlayoko Lake
Chilco Lake
Tatla Lake
Martins Ranch
Hanceville
Alexandria
Quesnel
Soda Creek
Williams Lake
Horsefly
Quesnel Lake
Troquois Village
Mt. Brown
Mt. Hooker
Yellowhead Pass
Mt. Murchison
Sullivan Peak
La Porte
Calgary
Crossfield
Mt. Head
Fort Steele
Cranbrook
Fernie
Elko
Gateway
Porthill
Bonners Ferry
Newport
Colville
Spokane
Rockport
Wenatchee
Okanogan
Penticton
Princeton
Granite Creek
Nicola Lake
Douglas Lake
Grand Prairie
Kamloops
Shuswap Lake
Revelstoke
Arrowhead
Evanmore
Wigwam
Golden
Donald
Field
Laggan
Banff
Canmore
Lac la Hache
Canim Lake
Tatlayoko Lake
Chilco Lake
Tatla Lake
Martins Ranch
Hanceville

continued his farming operations for from six to ten years, however, is in circumstances which many farmers in older countries have been unable to reach after a lifetime of toil. The labourer, likewise, is happy and contented; he is only waiting for an opportunity to get a farm of his own and become as independent as his employer. With a farm free from debt, his fields of ripening grain ready for harvest; with herds of cattle on his pasture lands, and flocks of sheep feeding on the hillside; dairy and poultry providing the household with groceries and many other comforts; schools for his children in the immediate neighborhood; churches close at hand, and such other social advantages as he desires within easy reach—what more is required for a wholesome existence? And that is the condition of the average Manitoba farmer to-day.



Homesteads may still be obtained on the outskirts of present settlements to the east of the Red River and between Lakes Winnipeg and Manitoba, as well as on the west of Lake Manitoba, and in the newly opened districts along the completed line of the Canada Northern Railway and the portions projected.

RAINFALL; WATER AND FUEL.

Manitoba is not a country of deep snows, as may be judged from the fact that trains are rarely blocked and seldom delayed by winter storms. The annual precipitation is 21.4 inches; mean annual temperature at Winnipeg, 32.7°; January, 5.2°; July, 66.1°.

Water and fuel are important considerations for the settler. In Manitoba, the country is everywhere at easy distances intersected by creeks and rivers, and there are many lakes, especially in the northern portion of the Province. Water can be secured almost anywhere by sinking wells to a moderate depth. The coal fields of the west and the timbered districts of the north and east, as well as the south, will supply fuel for hundreds of years.

CITIES, TOWNS, AND VILLAGES.

Besides Winnipeg, the seat of government, there is the city of Brandon, next in importance, followed by the towns of Portage la Prairie, Morden, Carberry, Neepawa, Manitou, Dauphin, Minnedosa, Birtle, Emerson, Gretna, Wawanesa, Baldur, Souris, Deloraine, Melita, Virden, Rapid City, Hamiota, Gladstone, and a number of others which are rapidly rising in prominence owing to the stability that is given them by the surrounding agricultural districts. Each has its elevators, mills, and warehouses, to accommodate the large quantities of wheat that are marketed. There are scores of towns yet to be developed along the lines of railway throughout the Province, so that newcomers will find openings in this direction if they so desire.

MANITOBA WHEAT PRODUCTION IN COMPARISON.

The following table will give some idea of the producing capacity per acre of this land as compared with that of the wheat raising belt in the United States:

	Av. for 10 yrs. Bu.	1903 Bu	1902 Bu.	1901 Bu.	1900 Bu.	1899 Bu.
Manitoba	21.7	16.4	26.0	25 1	8.9	17.1
Kansas	12.7	17 1	10.9	18 5	17.7	9.8
Minnesota ...	14.2	13.1	13.9	12.9	10.5	13.4
North Dakota	12 7	12.7	15.9	13.1	4.9	12.8
South Dakota .	10 4	13.8	12 2	12.9	6 9	10.7
Nebraska	12.2	12.6	20.0	17.1	12.0	10.3
Iowa	14.7	12.1				
Missouri ...	11 6	* 8.7				

*Winter wheat, other figures being for spring wheat.

In the Northwest Territories—being much more recently settled than Manitoba—the records do not go back so far, but they show an average yield per acre equal to that of Manitoba, and for the last two years, as a matter of fact, greater.

RAILWAYS.

Railways ramify through the more thickly settled portions of the Province, providing accommodation for the marketing of the produce of the farms. In many cases settlement has been so rapid that it has anticipated railway-building. The new districts of the Province, those lying in the northern and northwestern sections, are being developed most rapidly, and railway communication in these parts is being provided as the construction of new railway lines becomes possible. The Grand Trunk Pacific, the proposed new trans-continental railway, will overcome many of the difficulties of new and adventurous settlers This will make the third line of railway in the Province. The Canadian Pacific is one of the other two lines—the main line of which passes directly east and west, with branches from Winnipeg, Portage la Prairie, and Brandon. The branches cover most of the southern portion of the Province, while others extend to the northwest, all of them opening up important districts. The Canadian Northern Railway system passes through the populous districts of the south, and by means of its northern line, which also has several branches, it will make

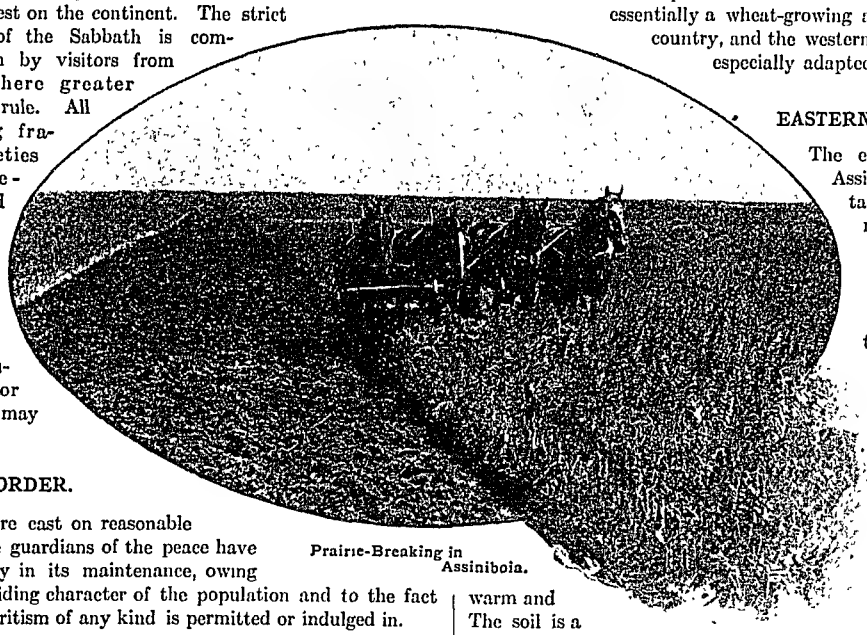
Nebraska Colonists Starting on the Overland Route for Western Canada.

connection with its line to the Pacific Ocean. Therefore the railways under operation and those which are certain to be built in the near future, give Manitoba an excellent position as regards communications.

SCHOOLS AND CHURCHES.

From a social standpoint Manitoba has every advantage that could be desired. Educationally, the Province holds a proud position, with its university, colleges, and schools. The school system is one of the best, the training of teachers and their qualifications being of a high standard. The schools are free, the organization being on what is known as the National System. The Government gives large grants, practically reducing the charge on the ratepayers to a merely nominal figure. One-eighteenth of the land is set apart for school purposes.

Churches are found in all the new settlements, and missionaries of various religious denominations keep pace with settlement, and sometimes anticipate it. Some of the church edifices are among the best on the continent. The strict observance of the Sabbath is commented upon by visitors from districts where greater laxity is the rule. All the leading fraternal societies are represented, and whether it be in the hamlet of a few dozen persons or in the city with its thousands, one or more lodges may be found.



Prairie-Breaking in Assiniboia.

LAW AND ORDER.

The laws are cast on reasonable lines, and the guardians of the peace have little difficulty in its maintenance, owing to the law-abiding character of the population and to the fact that no favouritism of any kind is permitted or indulged in.

AN EXPERT'S OPINION.

The editor of the Wisconsin Agriculturist, one of a party of editors of agricultural papers, who travelled through Canada during the spring of 1903, deemed it necessary to make an extended trip, in view of the number from the States crossing the line in search of permanent homes, and because of what he had heard in regard to conditions of soil, water, climate, topography, fuel, grasses, rainfall, and markets. He says:

"The Province of Manitoba comprises within its limits the famed grain-growing valleys of the Assiniboine and Red rivers. Although called the Prairie Province of Canada, Manitoba has large areas of forest, numerous rivers, and vast expanses of water.

"The soil is a rich, deep mould or loam, resting on a deep clay subsoil. It is well adapted to wheat growing, giving a bountiful yield of the finest quality, known the world over as No. 1 hard wheat. During the past ten years the growth of wheat and other grains has steadily increased, until now the production, by 35,000 farmers, reaches over 100,000,000 bushels. Of the 23,000,000 arable acres in Manitoba, probably not one-half is occupied. Cultivated grasses yield about two tons per acre, and native grasses a ton and a half.

"There can be no question but that dairying will become a great industry throughout the Northwest, and especially cheese making, as the climate is favourable and similar to that of Ontario.

"Crops grown are wheat, barley, oats, flax, rye, peas, corn for fodder, brome, potatoes, roots, etc. The soil is very fertile, and moisture ample. The long days make growth fast and push crops to maturity ahead of frost."

Assiniboia.

The District of Assiniboia lies between the Province of Manitoba and the District of Alberta; extending north from the international boundary to the 52d parallel of latitude, and containing an area of 34,000,000 acres. It has a length of about 450 miles east and west by 205 miles north and south. Travelling westward on the line of the Canadian Pacific Railway, the District is entered at a point 212 miles west of Winnipeg. It is divided into two great areas—Eastern and Western Assiniboia—each of which has its own peculiar characteristics, the former being essentially a wheat-growing and mixed farming country, and the western part of the latter especially adapted for ranching.

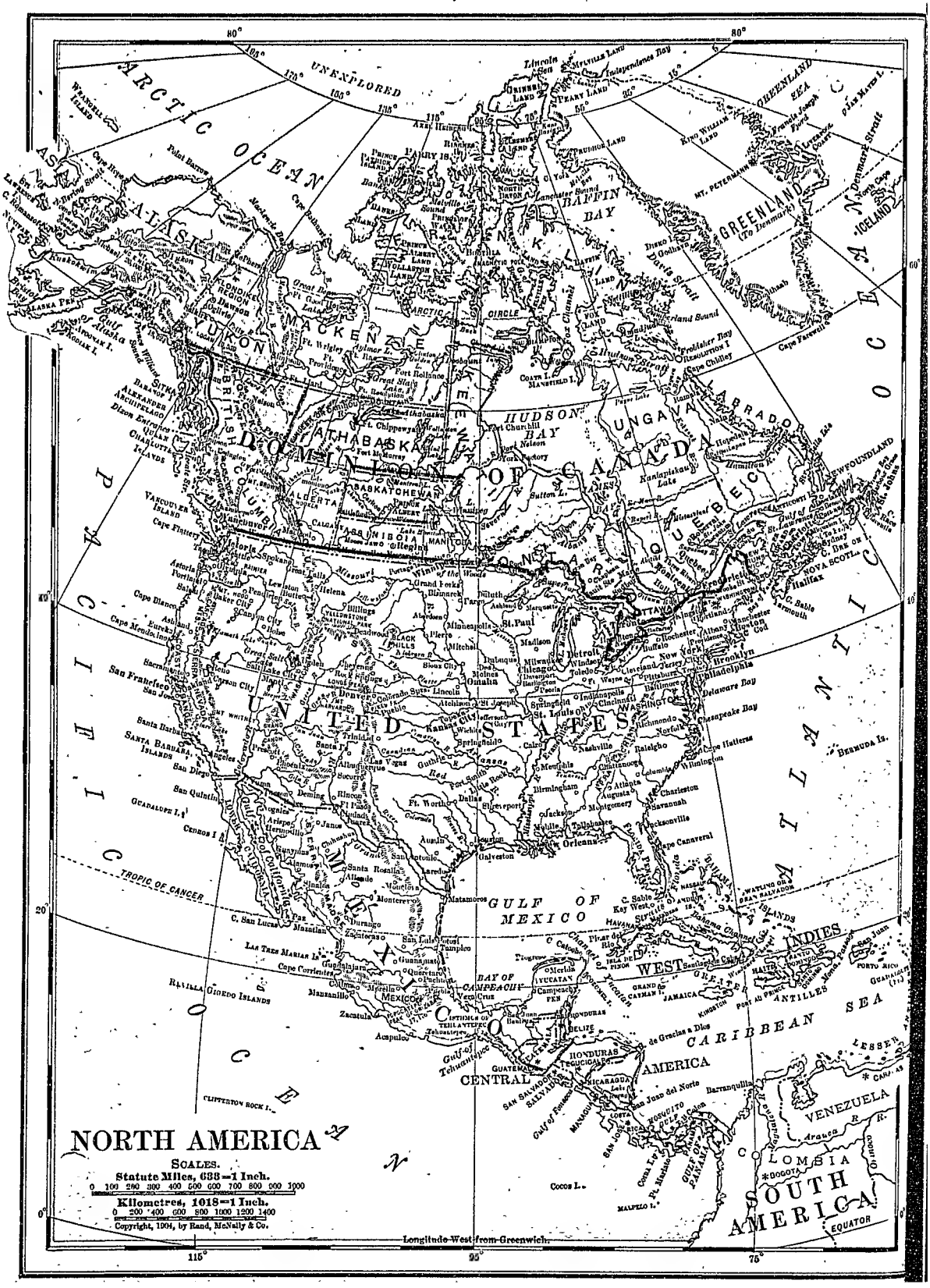
EASTERN ASSINIBOIA.

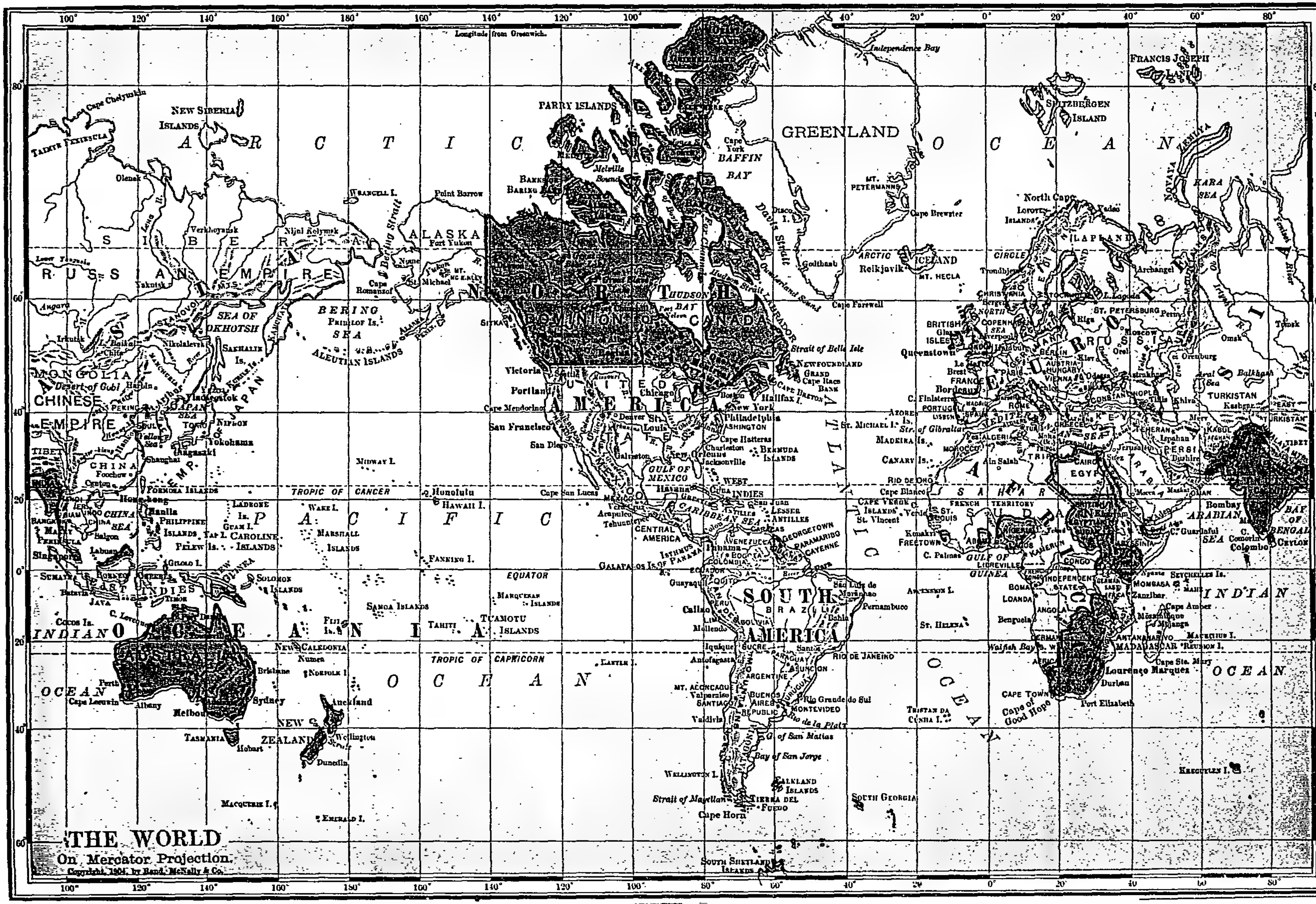
The eastern portion of Assiniboia, for a distance of some 120 miles west from its eastern boundary, is practically a continuation to the westward of the grain-growing areas of Manitoba, and although the soil is somewhat lighter than the deep black loam of the Red River Valley, it is productive. The soil is a friable loam, easily worked, and producing excellent crops of wheat, coarse grains, and vegetables. The winter climate is warm and answers all requirements, both as to degree of cold and as to sufficiency of snowfall, for the production of the No. 1 hard wheat for which Western Canada is now noted.

This District, in conjunction with the Province of Manitoba, will one day be one of the greatest wheat-producing sections of the American continent, and for the following reasons: 1st—It has a soil particularly rich in the food of the wheat-plant. 2d—It has a climate that brings the plant to maturity with great rapidity. 3d—On account of its northern latitude it receives more sunshine during the period of growth than the country to the south. 4th—Absence of rust due to dryness of climate. 5th—Absence of insect foes.

These conditions are especially favourable to the growth of the hard, flinty wheat so greatly prized by millers all the world over, and commanding a higher price than the softer varieties grown elsewhere.

The summers leave little to be desired in an agricultural country, cyclones or violent storms being thus far unknown.


NORTH AMERICA
SCALES.
Statute Miles, 633=1 Inch.
0 100 200 300 400 500 600 700 800 900 1000
Kilometres, 1018=1 Inch.
0 200 400 600 800 1000 1200 1400
Copyright, 1904, by Rand, McNally & Co.
Longitude West from Greenwich.
ARCTIC OCEAN
UNEXPLORED
ALASKA
YUKON
MACKENZIE
KEEWATIN
BRITISH DOMINION OF CANADA
HUDSON BAY
LABRADOR
NEWFOUNDLAND
GREENLAND (To Denmark)
BAFFIN BAY
ICELAND
ATLANTIC OCEAN
PACIFIC OCEAN
UNITED STATES
MEXICO
GULF OF MEXICO
CENTRAL AMERICA
CARIBBEAN SEA
WEST INDIES
VENEZUELA
COLOMBIA
SOUTH AMERICA
TROPIC OF CANCER
EQUATOR
Arctic Circle
Bermuda Is.
Cocos I.
Galapagos Islands


THE WORLD
On Mercator Projection.
ARCTIC OCEAN
GREENLAND
RUSSIAN EMPIRE
SIBERIA
ALASKA
BERING SEA
SEA OF OKHOTSK
ALEUTIAN ISLANDS
HUDSON BAY
BAFFIN BAY
DOMINION OF CANADA
NORTH AMERICA
UNITED STATES
GULF OF MEXICO
WEST INDIES
CARIBBEAN SEA
CENTRAL AMERICA
SOUTH AMERICA
BRAZIL
ARGENTINE REPUBLIC
ATLANTIC OCEAN
PACIFIC OCEAN
INDIAN OCEAN
EUROPE
AFRICA
SAHARA
SUDAN
EGYPT
ARABIA
ARABIAN SEA
BAY OF BENGAL
CHINESE EMPIRE
MONGOLIA
CHINA
JAPAN
EAST INDIES
AUSTRALIA
NEW ZEALAND
TASMANIA
MADAGASCAR
ICELAND
TURKISTAN
TIBET
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
ARCTIC CIRCLE
Longitude from Greenwich.

In most parts of the District good water can be obtained at a reasonable depth. Within this portion of the District settlement has extended rapidly, and many thriving towns have sprung up along the main line of the Canadian Pacific Railway, among which may be mentioned Moosomin, Grenfell, Wolseley, Indian Head, and Qu'Appelle, and on the line of the Manitoba & Northwestern Railway, Saltcoats and Yorkton. Here appears the gradual change from the wooded areas of Manitoba to the great plains region of the Territories. In many places the country is park-like, with alternating bluffs of poplar and willow, and open prairie.

RAILWAYS IN ASSINIBOIA.

The main line of the Canadian Pacific Railway extends east to west almost through the centre of Assiniboia, and branch lines of this road extend from Moose Jaw to the southeast corner for mixed farming north of the Moose Mountains. When completed this will connect with the Arcola branch.

Extensions of the Canadian Northern into Southern Assiniboia will give additional railway advantages. Districts that are now being settled in advance of the railway will welcome these extensions.

North of the main line of the Canadian Pacific there are a number of branch lines, both of the Canadian Pacific and Canadian Northern, under construction or projected. These pass through districts that have been opened up within the past year or two. Those have been fortunate who have been able to secure lands by purchase or homestead right in the districts traversed by these roads. They are specially adapted to mixed farming and stock raising, as well as the raising of grain. A section attracting attention is the Quill Plains, which will be reached by two lines of railway. The entire country lying north of

AREA AND YIELD OF PRINCIPAL CROPS OF MANITOBA.

YEAR	WHEAT		OATS		BARLEY		POTATOES	
	Acres	Bush.	Acres	Bush.	Acres	Bush.	Acres	Bush.
1893	1,003,040	15,615,023	388,520	9,823,095	114,702	2,517,053		1,649,885
1894	1,010,186	17,172,883	413,086	11,907,854	119,528	2,981,716		2,035,336
1895	1,140,270	31,775,088	482,058	22,555,733	153,830	5,645,030	16,716	4,012,502
1896	999,598	14,871,806	442,445	12,502,318	127,885	3,171,747	12,260	1,962,400
1897	1,200,882	18,201,950	403,141	10,620,518	153,206	3,189,002	13,576	2,033,208
1898	1,488,222	25,313,745	514,824	17,303,252	153,059	4,277,027	19,701	3,253,033
1899	1,620,905	27,322,230	575,186	22,318,378	182,012	5,379,150	19,151	3,220,395
1900	1,457,396	18,025,252	420,108	8,814,312	155,111	2,939,477	16,880	2,220,880
1901	2,011,835	50,502,085	689,951	27,796,588	191,009	6,530,155	24,429	4,707,493
1902	2,039,940	53,077,207	725,060	34,478,160	320,790	11,848,422	22,005	3,459,325
1903	2,442,878	40,110,878	855,491	33,085,774	326,587	8,707,252	27,198	4,757,000

AREA AND YIELD OF PRINCIPAL CROPS OF NORTHWEST TERRITORIES

YEAR	WHEAT			OATS			BARLEY		
	Acres	Bushels	Yield per Acre	Acres	Bushels	Yield per Acre	Acres	Bushels	Yield per Acre
1898	307,580	5,542,478	18.01	105,077	3,040,307	28.93	17,092	449,512	26.19
1899	363,523	6,915,623	19.02	184,088	4,636,030	34.81	14,276	337,521	23.62
1900	412,861	4,023,204	9.75	175,439	4,226,152	24.08	17,044	353,216	20.72
1901	504,607	12,808,447	25.37	220,130	11,118,066	48.43	24,702	795,100	32.18
1902	625,758	18,050,850	22.30	310,307	10,661,295	34.35	30,445	870,417	23.88
1903	837,234	16,020,140	19.00	410,602	14,179,705	33.74	60,667	1,741,209	21.65

FALL WHEAT, 1903: Acreage, 3,440; Yield, 82,420; Average, 23 88.

of the District, and from Regina to the north through the central portion. The Manitoba & Northwestern Railway extends into the northeastern portion of the District from Manitoba, and present requirements in the way of transportation are thus well provided for. Branch lines of these railways are under construction, and they will open up a portion of the country north of the Qu'Appelle River that is unsurpassed anywhere for mixed farming or the growth of cereals.

During the past year a large amount of railway construction has been carried on, and the southern portion of what is termed Eastern Assiniboia is well supplied. Almost parallelling the boundary line between the United States and Canada is the Southeastern; a short distance north of this, with a possible connection on the "Soo" line, is a projected branch; and not far north of this again is the Arcola branch of the Canadian Pacific, forming a junction at Regina with the main line, its eastern terminus being Winnipeg. The Arcola line runs close to the Moose Mountains, passing through the well-known Alameda district. It also opens up a magnificent stretch of wheat-growing lands south of Regina and Indian Head. Another projected line south of the main line is one from Moosomin, which will open up a large district of land suitable Qu'Appelle River will shortly be served by railways. These will pass through Last Mountain Lake district, on their way to the Saskatchewan.

RIVERS AND SMALLER STREAMS.

The South Saskatchewan River flows nearly due east for about two hundred miles, turns almost at a right angle to the north, and leaves the District about the middle of its northern boundary. The Qu'Appelle, Assiniboine, and other rivers, all fed by small streams and creeks, are to the north, and the Souris River, the Pipestone Creek, Long Creek, and many minor streams to the south. The valleys along these rivers and creeks are specially adapted for mixed farming, and the open prairie beyond affords large areas for grazing or grain growing. To the south are Moose Mountains, thirty miles in length from east to west, and fifteen from north to south. In parts this area is thickly wooded, and many local water courses head there and run down to the surrounding plains. The pasture is luxuriant, while water in streams, small lakes, and ponds is abundant. The slopes of the mountains are dotted with farms, while the open plain at their base affords grazing for herds of cattle and flocks of sheep. The settlement that has been directed here has done well.

SOME OF THE DISTRICTS.

For agricultural uses the districts of Moosomin and Qu'Appelle are wonderfully favoured, lying as they do in the great stretch of the fertile belt. The Moosomin district is included in the country between the Manitoba boundary on the east and the second meridian on the west, and is bounded on the north by the valley of the Qu'Appelle River, and on the south by the Pipestone Creek, an ideal range for cattle.

The Qu'Appelle district is that section which lies immediately west of the Moosomin, extending to the height of land at McLean Station on the Canadian Pacific Railway, around to the Beaver Hills, and south almost to the international boundary line. Included in this area are the Pleasant Plains, no less fertile than the famous wheat-growing plains of Manitoba, where crops

Corn-Cutting in Western Canada.

are phenomenally large. The soil is for the most part loam, covered with about twelve to eighteen inches of black vegetable mould, which after the second ploughing makes a fine seed-bed, easy to work, and most productive. Generally speaking, these remarks apply to all the eastern part of the district. The Beaver Hills and the Touchwood Hills in the northern part are especially well adapted for stock-raising. Mixed farming has also proved very successful. Most important development has taken place on that portion of the Prince Albert branch of the Canadian Pacific Railway running through Assiniboia. Lumsden, Craik, Girvin, Hanley, and Dundurn are thriving towns, populated mostly by settlers from the United States, some of whom, with commendable thrift and enterprise, have erected splendid buildings in the towns, while others have developed the resources and increased the land values of the country districts. A large acreage has been prepared for next season, and abundant yields are confidently looked for. Although large quantities of land have been disposed of and occupied as homesteads in these districts, there are still innumerable opportunities for settlers to acquire land free from the Government, and at reasonable prices from the railway or land companies. Many of these land companies have agencies in the Western United States and representatives in the principal towns in the vicinity of the lands they offer. Extending back eastward and westward from the points named are large settlements.

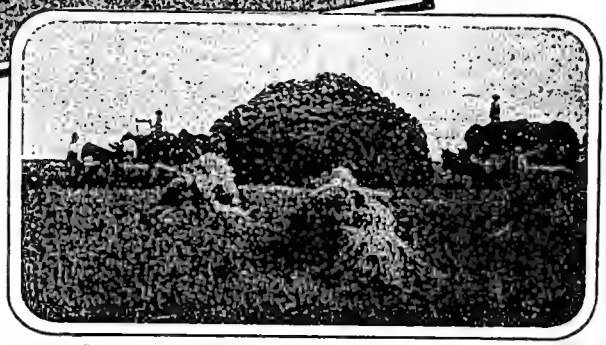
FUEL.

Coal in abundance is found in the south, in the district drained by the Souris River. Sufficient wood for all purposes for many years to come is to be found along the rivers and in the Moose Mountains.

WESTERN ASSINIBOIA.

The foregoing remarks, written of Eastern Assiniboia, apply to a large portion of Western Assiniboia, and also to Saskatchewan and Alberta. Western Assiniboia is entered at McLean Station, and its first considerable town is Regina, the capital of the Northwest Territories. The land here is a rich, fertile loam, as well to the south as to the north.

During the past two years marked development has taken place along the "Soo" Line. Most of this land has been taken up by settlers from the United States, who have "broken"



Harvest and Threshing Time in Western Canada.

large areas. The crops here last season were excellent, and the settlers speak most encouragingly of their prospects. Several new and important towns have sprung into existence along this line, such as Halbrite, Weyburn, Yellow Grass, Milestone, and Rouleau. The cultivation of flax is carried on to a large extent. A number of farmers have paid the entire cost of their farms from the yield of the first crop of flax.

The best testimony to the character of the country that can be given is that those settlers who have been longest in the country are those who are almost yearly enlarging their farms by buying more land, a quarter of a section at a time.

GROWTH OF EDUCATION IN WESTERN CANADA

YEAR	NO. OF SCHOOLS	TOTAL EXPENDITURES	NO. OF TEACHERS	NO. OF PUPILS
BRITISH COLUMBIA				
1891	126	$ 171,611	185	9,260
1892	149	207,330	226	10,773
1893	166	215,050	267	11,496
1894	185	195,915	295	12,613
1895	202	208,000	319	13,402
1896	220	204,395	350	14,460
1897	244	236,681	384	15,796
1898	261	200,265	422	17,646
1899	280	336,016	261	10,185
1900	296	303,389	494	21,531
1901	318	351,852	543	23,615
1902	337	438,086	570	23,903
MANITOBA				
1891	612	$ 457,251	866	23,871
1892	660	636,592	902	23,244
1893	718	744,178	997	28,706
1894	884	774,866	1,047	32,680
1895	982	797,542	1,093	35,371
1896	1,032	810,912	1,143	37,987
1897	1,068	806,417	1,197	39,841
1898	1,250	1,011,368	1,301	44,370
1899	1,313	1,089,304	1,472	48,660
1900	1,352	1,170,410	1,596	50,460
1901	1,416	1,272,617	1,669	51,888
1902	1,488	1,455,051	1,869	54,056
THE TERRITORIES				
1891	213	$ 120,042	248	5,652
1892	249	131,057	295	6,170
1893	262	106,579	307	8,214
1894	300	114,000	353	10,721
1895	341	112,183	401	11,972
1896	366	126,218	433	12,796
1897	394	131,457	457	14,576
1898	426	135,643	483	16,754
1899	453	142,455	543	18,801
1900	492	168,332	592	20,343
1901	562	162,215	679	23,687
1902	640	155,558	783	27,441

STEAM RAILWAY STATISTICS FOR DOMINION OF CANADA

YEAR	MILES IN OPERATION	EARNINGS	NO. OF PASS. CARRIED	TONS OF FREIGHT CARRIED
1886	10,697	$ 33,389,382	9,861,024	15,670,460
1887	11,691	38,842,010	10,698,638	16,356,335
1888	12,163	42,159,153	11,416,791	17,173,759
1889	12,628	43,149,616	12,151,051	17,928,626
1890	13,256	46,843,826	12,821,262	20,787,469
1891	14,009	48,102,099	13,222,568	21,153,021
1892	14,588	51,685,768	13,533,414	22,189,923
1893	15,020	52,042,397	13,618,027	22,003,599
1894	15,613	49,487,905	14,983,620	20,721,116
1895	15,941	46,055,386	12,520,585	21,524,421
1896	16,214	50,374,295	13,059,023	24,248,294
1897	16,437	52,100,518	13,742,454	25,230,470
1898	16,584	59,859,930	14,766,359	28,699,997
1899	17,115	61,831,325	15,451,082	31,068,159
1900	17,481	70,281,979	17,122,193	35,764,970
1901	18,140	72,893,740	18,385,722	36,999,371
1902	18,714	83,666,503	20,697,794	42,376,527

QUANTITIES OF BREADSTUFFS EXPORTED FROM CANADA. (Domestic Produce)

YEAR	Wheat	Flour of Wheat	Wheat and Flour	Barley	Oats	Rye	Corn	Other Grain	Oatmeal	Bran	Other Breadstuffs
	Bushels	Barrels	Bushels	Bushels	Bushels	Bushels	Bushels	Bushels	Barrels	C'w't	Lbs.
1893	9,271,885	410,285	11,117,717	2,010,048	7,973,000	50,121	2,700	4,123,221	154,387	295,023	1,720,900
1894	9,272,208	428,610	11,200,053	597,405	2,813,709	62,072	734	4,112,775	86,114	191,561	875,800
1895	8,325,080	229,075	9,892,076	1,763,870	920,075	62,042	120	2,907,701	80,203	119,197	797,900
1896	9,010,842	193,716	10,750,704	810,725	908,197	20	9,705	2,410,500	110,255	130,112	813,500
1897	7,865,274	421,768	9,753,185	1,891,091	6,510,381	216,403	53,913	4,775,522	154,019	173,189	1,354,900
1898	16,508,107	1,240,438	24,930,658	443,656	9,370,103	1,139,546	2,089	4,268,001	176,321	270,403	1,120,800
1899	10,305,470	702,59	15,007,927	238,018	10,617,702	327,486	140,032	3,557,804	119,986	227,440	857,000
1900	19,344,050	708,102	20,365,303	2,154,282	6,920,214	474,572	2,142	3,619,470	145,307	192,507	1,633,300
1901	9,750,758	1,118,700	14,807,103	2,98 ,371	8,758,063	687,059	1,000	4,008,807	151,351	340,365	3,601,200
1902	20,117,630	31,080,048	51,066,000	457,117	5,030,128	300,280	203,033	2,502,400	91,706	2,880,500	5,888,800

VALUE OF BREADSTUFFS EXPORTED FROM CANADA. (Domestic Produce)

YEAR	Wheat	Flour of Wheat	Wheat and Flour	Barley	Oats	Rye	Corn	Other Grain	Oatmeal	Bran	Other Breadstuffs
1893	$ 7,060,033	$ 1,741,028	$ 8,801,061	$ 1,144,355	$ 2,553,010	$ 39,249	$ 2,308	$ 3,223,428	$ 625,977	$ 180,706	$ 46,044
1894	6,738,452	1,699,467	7,832,019	264,200	1,070,751	32,939	656	2,959,030	308,103	96,549	32,427
1895	5,830,109	889,112	6,103,221	720,718	320,458	33,003	112	2,382,859	270,310	87,259	21,506
1896	5,771,521	773,433	6,439,054	316,028	279,861	18	3,518	1,681,832	364,655	112,385	25,130
1897	5,541,107	1,540,851	7,085,048	566,505	1,635,190	92,044	23,938	2,799,271	462,049	122,177	28,831
1898	17,315,010	5,423,700	22,730,070	158,978	3,041,578	616,539	1,088	2,812,208	551,757	165,730	31,856
1899	7,784,487	3,105,788	10,890,275	110,040	3,203,388	196,447	48,812	2,277,196	396,568	167,120	8,052
1900	14,005,488	2,701,885	14,787,373	1,010,425	2,174,179	270,236	1,183	2,227,672	474,091	145,206	17,721
1901	6,871,039	4,015,220	10,887,105	1,123,055	2,490,521	424,877	703	3,522,544	467,807	242,245	82,709
1902	18,088,002	3,678,850	22,050,042	231,199	2,052,559	240,290	118,563	2,223,033	344,332	237,148	55,752

VALUE OF TOTAL GOODS EXPORTED FROM CANADA. (by Provinces)

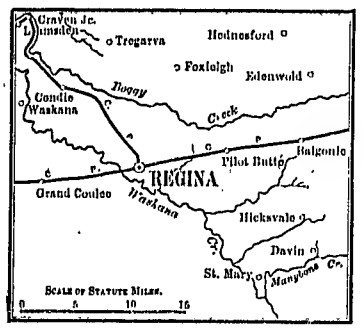
YEAR	ONTARIO	QUEBEC	NOVA SCOTIA	NEW BRUNSWICK	P. E. ISLAND	MANITOBA	BRITISH COLUMBIA	N. W. TERRITORIES
1893	$ 33,850,573	$ 58,055,427	$ 10,631,803	$ 7,251,611	$ 1,235,344	$ 1,211,077	$ 5,041,053	$ 81,504
1894	32,720,074	56,151,702	10,773,440	6,635,487	1,211,824	1,861,964	8,142,564	79,494
1895	33,096,131	50,001,501	11,723,534	6,388,657	1,039,493	1,611,009	9,121,098	77,733
1896	32,886,347	55,517,778	10,999,160	7,907,911	979,979	2,005,867	10,578,551	159,706
1897	39,518,226	60,276,166	11,332,090	9,581,982	1,314,607	1,995,755	14,017,563	166,389
1898	46,786,215	78,927,220	10,990,936	11,116,218	1,389,074	3,472,801	16,019,717	159,822
1899	48,197,012	70,811,571	11,450,120	10,492,329	1,289,650	2,092,988	14,742,032	343,294
1900	58,116,756	70,701,668	11,868,978	14,165,506	1,349,529	3,568,675	17,851,812	345,850
1901	39,490,028	93,540,609	12,720,343	14,338,459	681,403	1,084,992	21,048,191	1,520,936
1902	43,507,480	91,057,201	14,978,222	17,657,751	801,013	4,896,149	18,385,335	1,183,048

EXPORTS OF DAIRY PRODUCTS FROM CANADA (Home Production)

BUTTER		CHEESE		
QUANTITY	VALUE	YEAR	QUANTITY	VALUE
7,030,013 Lbs.	$ 1,208,814	1893	183,046,865 Lbs.	$ 13,407,470
5,594,021 "	1,005,588	1894	154,377,180 "	15,488,191
3,660,258 "	687,476	1895	140,004,050 "	14,233,009
5,850,241 "	1,172,089	1896	164,689,133 "	13,956,571
11,466,351 "	2,089,173	1897	164,220,800 "	14,071,209
11,238,787 "	2,046,086	1898	196,703,323 "	17,572,708
20,139,195 "	3,161,573	1899	189,227,886 "	16,776,705
25,250,787 "	5,122,150	1900	185,024,430 "	19,335,324
16,885,528 "	3,295,503	1901	195,920,307 "	20,660,661
27,855,978 "	5,630,541	1902	200,946,401 "	19,036,291

RANCHING.

West of Moosejaw, there is a change in the character of the country. The humid districts are left behind and the sub-arid portions approached. The prairie ceases to be suited to the plough, but affords first-class grazing for sheep and cattle. Very few farms are to be seen, and it is soon recognized that the ranching country has been reached. The ranching or arid zone begins about the north-eastern point of Montana and extends northwest in Assiniboia to a point near Southwestern Saskatchewan; it then drops down in a southwesterly direction to the mountains in Southern Alberta.



Great herds of range cattle roam at will all over these seemingly boundless pastures. The profits to the stockmen are large, as may be readily understood when it is known that $40 to $50 per head is paid on these ranges for steers that cost their owners only the interest on the original investment of stocking the ranch, and their share in the cost of the annual round-ups.

In this part of the Northwest the winters are mild and the snowfall is so light that cattle, horses, and sheep graze the whole year. There is little cropping, and only where irrigation has been effected by the construction of cheap ditches. This method has proved highly successful.

The Swift Current Creek region is excellent as a stock country. It is everywhere thickly covered with a good growth of nutritious grasses — mostly of the short, crisp variety, known as "buffalo grass," which becomes to all appearance dry about midsummer, but is still green and growing at the roots, and forms excellent pasture both in winter and summer. One is amazed at the rapidity with which emaciated animals brought from other parts fatten on the buffalo grass of the plains.

FUEL.

The supply of timber on the hills is considerable. There is also an abundance of fuel of a different kind in the coal seams that are exposed in many of the valleys. Settlers in this section of the country have thus an abundant supply of timber suitable for house logs and fencing, and both coal and wood for fuel.

CLIMATE.

Western Assiniboia feels the effects of the Chinook winds from the Pacific Ocean, which quickly remove much of the snow that falls during two or three months of the year. This circumstance, together with the rich growth of grass, has of late brought parts of Assiniboia into favor with cattle, sheep, and horse raisers, while portions of it are also noted for adaptability to grain-growing. The town of Medicine Hat, which is a divisional point on the railway, is situated on the South Saskatchewan River, near the western boundary of Assiniboia. Here is found natural gas of good quality.

This portion of Assiniboia offers splendid opportunities for intending settlers who desire to go in for pastoral pursuits and dairy farming, and numerous choice locations may be had. The natural grazing advantages enable one to keep a large number of cattle, sheep, or horses, which need no feed except for short intervals during exceptionally stormy weather in the winter months. During the past couple of years considerable has been done in the Medicine Hat district in grain-raising and mixed farming. Near Irvine there is a fairly large and prosperous German community. The remaining portion of the plains region along the northern and northwestern boundaries of Assiniboia affords excellent summer grazing for cattle and sheep. Some favourable locations are also to be found along the valley of the South Saskatchewan River.

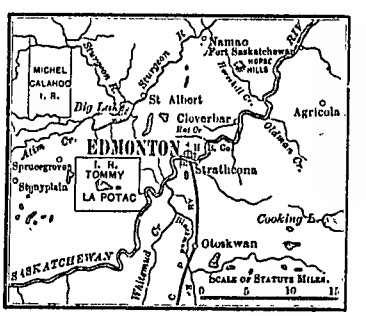
In writing to his paper, The Farmers' Review, of Chicago, Mr. Henry F. Thurston, after speaking of the remarkable yields of oats and wheat obtained in the vicinity of Moosejaw, says:

"Here agriculture and ranching go hand in hand; for near the town was seen a herd of beef cattle several hundred in number, while on another side was seen a good-sized herd of dairy cows, the property of citizens in the town.

"Instances were cited to the writer of men who last year cleared from their wheat more than the land on which it was grown originally cost them. This is easy to believe in view of the large crop and high price for wheat last year.

"There is thus not a mile of this country which can not be used for some agricultural purpose—either for tilling or ranching.

"The Moosejaw country is especially suitable for mixed farming. Indeed, almost the entire population consists of farmers with small bunches of cattle and a few scores of acres of land under crop. Creameries are easily accessible, and thus wheat-growing, dairying, and beef production, all on the same homestead, is a common feature. In most portions good water is obtainable at reasonable depth. At Indian Head larger wheat-growing areas are common, and the region of big grain fields is reached.



"The groves and clusters of trees scattered over the vast area appear like thousands of beautiful islands and complete a picture of beauty and utility.

"The poplar bluffs afford shelter to horses and cattle during stormy weather, and provide excellent fuel, and in some cases good material for buildings and fences."

SUMMING UP.

The possibilities of Assiniboia are shown by the averages of tests made at the experimental farm in 1902, when eleven varieties of the most suitable wheat, sown on April the 19th, were

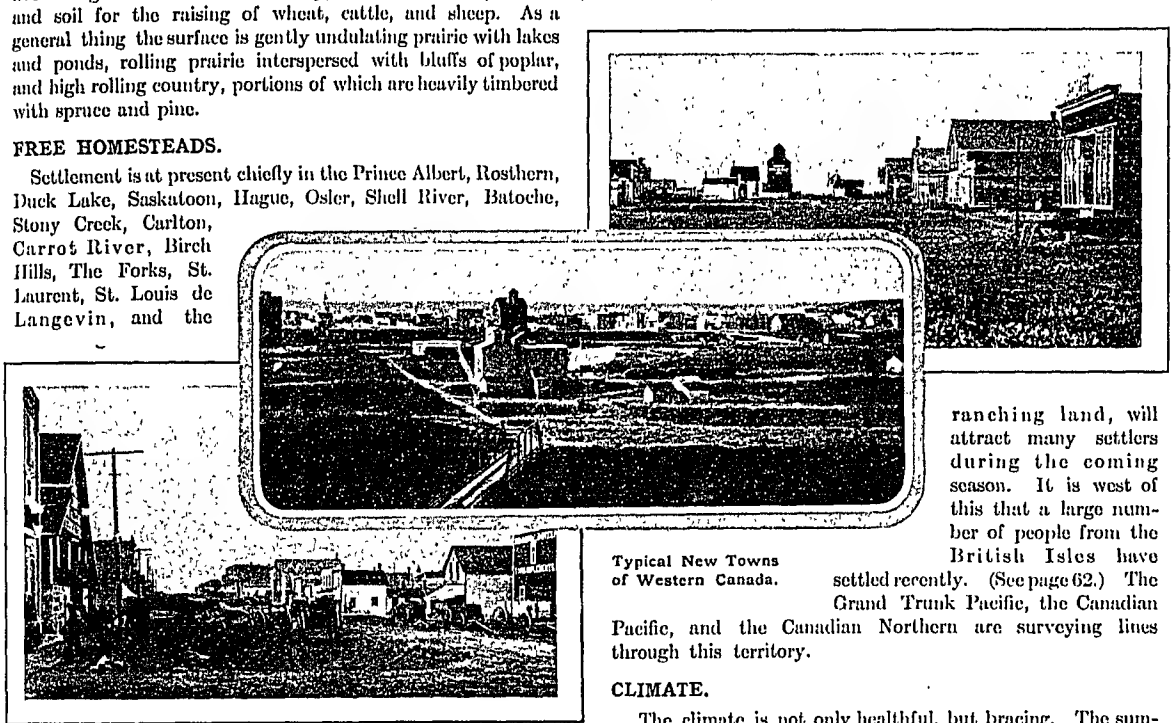
cut in 130 days, and yielded 4,314 pounds of straw and 43 bushels and 2 pounds of grain per acre. The mixed farming area is excellent, while the range cattle, horses, and sheep are all that can be desired. The treeless portion is underlaid with coal.

Saskatchewan.

Saskatchewan, lying north of Assiniboia, is the largest of the four provisional Districts which were carved out of the Territories by the Dominion Parliament in 1882. Its area is 106,700 square miles. It is almost centrally divided by the main Saskatchewan River, which is altogether within the District, and by its principal branch, the North Saskatchewan, most of whose navigable length lies within its boundaries. It includes in the south a small proportion of the great plains, and in its general superficial features may be described as a mixed prairie and wooded region, abounding in water and natural hay, and well suited by climate and soil for the raising of wheat, cattle, and sheep. As a general thing the surface is gently undulating prairie with lakes and ponds, rolling prairie interspersed with bluffs of poplar, and high rolling country, portions of which are heavily timbered with spruce and pine.

FREE HOMESTEADS.

Settlement is at present chiefly in the Prince Albert, Rosthern, Duck Lake, Saskatoon, Hague, Osler, Shell River, Batoche, Stony Creek, Carlton, Carrot River, Birch Hills, The Forks, St. Laurent, St. Louis de Langevin, and the Battleford districts, in nearly all of which a great quantity of the best land is open for free homesteading. Some of these places, especially those along the line of railway, have grown marvellously within the past two years. In great measure that which may be said of one district applies equally to the others. The crops consist of wheat, oats, barley, and potatoes. Turnips and all kinds of vegetables are raised successfully. The normal yield of wheat (Red Fyfe) is about thirty bushels to the acre in favourable seasons; of oats, about sixty bushels. There has never been a failure of crops, and settlers enjoy a steady home market, from which they realize good prices for their products. The district is well supplied with good roads. Wild fruits of nearly every variety—strawberry, raspberry, gooseberry, blueberry, high-bush cranberry, and black currants—grow in profusion. Small game is plentiful.



Typical New Towns of Western Canada.

LANDS FOR SALE AT LOW PRICES.

Large areas of land have been purchased by various land companies. In addition to the excellent lands of the Canadian Pacific Railway, which are being sold at reasonable prices, those granted to the Canadian Northern Railway, and especially selected for their adaptability to grain-raising, mixed farming, and ranching, are on the market, and finding ready purchasers. When it is known that in many instances farmers have paid for their holdings out of a single crop, it will be readily understood how liberal are the terms on which land may be had. Prices range, for unimproved land, from $5(£1) to $12 (£2 8s.) per acre.

The same marked development is noticed west as well as east of the present line of railway, and when the Grand Trunk Pacific is built and extended from east to west, almost every portion of Saskatchewan will be fully served. West of the railway is to be found land of exceptional fertility. Very much of this is yet unsettled. Great interest is taken in the entire district lying along the north branch of the Saskatchewan. The Battleford district, the centre of a rich section of farming and ranching land, will attract many settlers during the coming season. It is west of this that a large number of people from the British Isles have settled recently. (See page 62.) The Grand Trunk Pacific, the Canadian Pacific, and the Canadian Northern are surveying lines through this territory.

CLIMATE.

The climate is not only healthful, but bracing. The summer temperature is remarkably equable, averaging about 60°. Spring opens about the beginning of April. Seeding is generally completed in May, and harvest usually begins about the third week in August. During winter settlers are generally employed in getting out fuel, rails for fencing, and logs for building purposes; in marketing their grain; and in caring for stock.

"At the time of writing, October 2, the trees are resplendent in yellows, reds, and browns, exhaling a delicious odor of poplar breath. The air is balmy, with no suggestion of frost, and although it is farther north than the northern boundary of Manitoba, no damage has yet been done by the cold. Residents go about without top coats, the days are bright with sunshine, and harvesting operations are only now being brought to a conclusion."—*Newspaper Correspondent.*

RIVERS.

The Saskatchewan is a magnificent stream, and with its immense network of tributaries it waters a territory that is a veritable empire in extent. It is formed by the confluence of

the north and south forks—the latter having its rise in the Rocky Mountains a hundred miles or so north of the international boundary, and the former in the same range a little farther north. The two forks diverge fully 250 miles in their eastern course, but finally come together in the District of Saskatchewan, near the town of Prince Albert. The stream then continues its course eastward and empties into Lake Winnipeg. It is navigable, and will play an important part in the transportation of bulky freights as the country is opened up.

STOCK-RAISING AND RANCHING.

The country is remarkably well adapted for stock raising, and large shipments are made annually. Cattle must be fed and sheltered three to four months every winter. Horses winter out well, and can, therefore, be kept in large bands. Sheep require the same care as cattle, and do better in small flocks.

DAIRY FARMING.

Any portion of this district will answer all the requirements for dairy farming. On the slopes of the Eagle Hills, or south of the Saskatchewan, conditions are most suitable, owing to the luxuriance of the grass and abundance of springs. North of the Saskatchewan are good grass lands, particularly in the vicinity of Jackfish Lake and Turtle Mountain. In the former district an extensive creamery has been established, which makes large shipments to British Columbia. The abundance of pure water and the coolness of the nights favour dairying. The home demand is now and always has been large, so that dairy products command good prices.

Western Canada Potato Field—Prairie Park in the Distance.

SOIL, WATER, AND FUEL.

The soil ranges from clay loam to sandy loam, with rich, chocolate-colored clay to sandy subsoil.

The country is well watered; not everyone can locate on the banks of a running stream, but anyone can get a plentiful supply of good water by digging a few feet for it.

To the north there are bluffs of spruce and pine, and the miles of outcropping coal, with the forests on the North Saskatchewan, insure an ample supply of cheap fuel and building material.

DEVELOPMENT RAPID AND GENERAL.

The tide of immigration to the Saskatchewan District has been steadily increasing year by year, as the country has become better known, and doubtless its development will receive a very considerable impulse with the spread of railway communication and the greater facility thus afforded for marketing produce.

Along the line of the Canadian Northern, as well as along the Regina & Long Lake Railway, the northern terminus of which at present is Prince Albert, hundreds of settlers from the United States have gone within the past year. Most of them took up a homestead and bought additional land from other large owners or dealers.

The town of Prince Albert, on the north branch of the Saskatchewan, is the seat of various industries. Three lumber mills are now in operation—two in the town and a third at Steep Creek, a few miles distant. From these mills a large quantity of lumber is exported by the railway, in addition to the supply required for the various building needs of the region. At Duck Lake the traveller leaves prairie behind, and enters a wooded, park-like area, resembling in appearance the country of old Ontario.

In addition to districts previously mentioned, the Melfort district, on the Saskatchewan, forty miles east of Prince Albert, is highly spoken of. Another large tract is the stretch of prairie west from Redberry Lake, lying toward Battleford, in the elbow formed by the North Saskatchewan. This fertile plain reaches over to the Vermilion River country, into which outposts of settlement have been planted, going by way of Edmonton.

VAST RAILWAY PROJECTS.

The Canadian Northern is already at work on the extension of its Swan River branch toward the Saskatchewan. This will give access to the Carrot River country, where settlers from all parts of the United States and Europe have taken up land sixty and seventy miles from present railways.

While this railway will be of material benefit, it is only a small part of the great projects of the rival companies for opening up the Saskatchewan Valley. The race across the northern grain belt toward the Pacific on the part of the Canadian Pacific Railway and the Canadian Northern Railway is now on, and it may be said that they will give Saskatchewan two great east and west trunk lines hundreds of miles in length. The engineers and surveyors of the Grand Trunk Pacific are on the ground selecting a location for that railway and its branches. It is not surprising, under these circumstances, that the rich lands of the Saskatchewan Valley should suddenly become valuable.

MOISTURE.

Moisture is ample in Saskatchewan District, the precipitation being about eighteen inches annually. It is notable that about 75 per cent of the rainfall is during the crop months. With rain coming when needed and with several hours' more sunshine daily during the growing season than farther south, it is not difficult to understand why crops mature quickly and yield bountifully.

Alberta.

The District of Alberta has a total length from north to south of about 430 miles, and an average width from east to west of about 250 miles, containing an area of 106,100 square miles. The District is bounded on the east by the Districts of Assiniboia and Saskatchewan, on the south by the international boundary, on the west by the Province of British Columbia, and on the north by the District of Athabaska. Alberta comprises within its limits two divisions, showing marked distinctions in topographical and climatic conditions. The southern is an open, rolling country, devoid of timber, except along the streams and in the foothills of the Rocky Mountains, while the northern half is more or less timbered throughout, the belts of timber being broken here and there by prairie openings, some of which are of considerable extent.

during the late summer months causing the native grasses to become cured on the ground, retaining their nutritive qualities in such a manner that stock pastured thereon remain fat all winter. Cold and stormy weather is, of course, experienced at times during the winter months, but the prevailing warm winds which blow from the west, locally known as Chinook winds, rapidly disperse any snow which falls, and for days at a time cause a rise in the thermometer to almost summer temperature.

RANCHING AND DAIRYING.

Southern Alberta is essentially a ranching and dairying country and offers unequalled opportunities for effort in those directions. The District is composed of high, open plains, broken by the valleys of numerous large streams which rise in the Rocky Mountains and flow to the east, the country becoming more or less rolling and hilly as the heads of these streams are approached. The valleys and bench-lands produce a most luxuriant and nutritious growth of native grasses, chief among which is the far-famed "bunch grass." Cattle, horses, and sheep graze outside during the whole year, and hay is easily and cheaply secured for weak stock. With good management, the profits to stockmen are large, $40 and $50 per head being paid for steers on the ranges last year. Large bands of young stock are annually brought in from Eastern Canada and some of the Western United States, to be fattened on the ranges, the profits being sufficiently large to amply pay for reshipment, after fattening, to European and other eastern markets. Mixed farming is successfully carried on somewhat generally.

Dairying is carried on with great success, the country being pre-eminently fitted for it. To a wide range of the best wild pasture are added an abundant water supply and shading and sheltering groves of trees. During the summer season the averages are for each cow, four and one-half gallons of milk per day, and six and one-half pounds of butter per week.

A Ten-Mile View in a Prairie and Wooded District of Western Canada.

The advantages which the northern and southern portions of the District offer to the intending settler are so diverse in character that it is customary to speak of them separately, as "Northern Alberta" and "Southern Alberta."

SOIL AND CLIMATE.

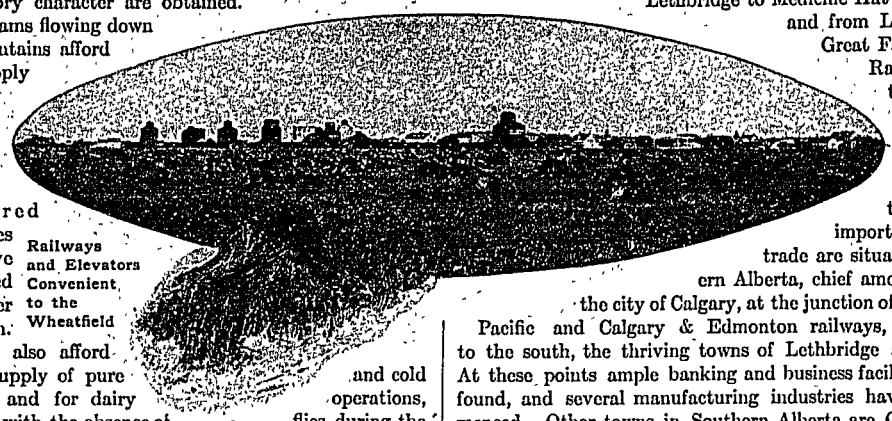
The soil of Alberta is, as a whole, a rich, alluvial loam. In places gravel and sandy ridges occur, but in the valleys the accumulated silt deposit of ages has produced a soil of the richest kind and of great depth.

The climate of Southern Alberta is one of its most attractive features, the winters being mild, with very little snow, and the summers hot and dry. The rainfall in this section is small, averaging about twelve inches in the year, and while this amount of precipitation is not sufficient to insure good crops in the majority of years, the aridity of the District constitutes its chief factor of value as a grazing country, the absence of rainfall

Though a large portion of Southern Alberta is bare of timber for fuel, this lack is amply compensated for by an inexhaustible supply of coal of excellent quality, which crops out at many points along the steep banks of the streams that plentifully water the country.

SUPPLY OF WATER.

In Southern Alberta irrigation is largely resorted to in producing grain and fodder crops, and by this means returns of the most satisfactory character are obtained. The many streams flowing down from the mountains afford a bountiful supply of water for this purpose, and at the present time some three hundred miles of ditches and canals have been constructed to carry water for irrigation. These streams also afford an unfailing supply of pure water for stock and for dairy and, combined with the absence of flies during the hot summer months, produce the best results in the production of butter and cheese.



Railways and Elevators Convenient to the Wheatfield

WINTER WHEAT IN ALBERTA.

During the past two or three years great success has followed the growing of winter wheat. This has been particularly the case in Southern Alberta, in the neighborhood of the foothills, north of Calgary, and around Lethbridge, Macleod, and Claresholm. Reports are at hand, showing a yield of forty-five bushels to the acre. Writing from Didsbury, Alberta, a farmer who has spent nine years in the country, liking it better as time goes on, says he thinks fall wheat will do as well there as in the East. W. C. Petre, of Red Deer, Alberta, writes encouragingly of the growth of fall wheat in that District.

RAILWAY COMMUNICATION.

Southern Alberta is traversed from east to west by the main line of the Canadian Pacific Railway, and from north to south by the Calgary & Edmonton Railway, and in addition a branch of the former line runs through the southwestern portion from Lethbridge to Medicine Hat in Assiniboia, and from Lethbridge the Great Falls & Canada Railway extends to the south as far as the Great Northern Railway in Montana. Several important centres of trade are situated in Southern Alberta, chief among which are the city of Calgary, at the junction of the Canadian Pacific and Calgary & Edmonton railways, and, farther to the south, the thriving towns of Lethbridge and Macleod. At these points ample banking and business facilities are to be found, and several manufacturing industries have been commenced. Other towns in Southern Alberta are Okotoks, High River, Cardston, Stirling, Magrath, Raymond (where a large beet-sugar factory has been erected), Claresholm, and Pincher Creek. The District now contains a large number of ranchers and dairy farmers; many favourable locations are to be had by incoming immigrants who may desire to embark in either of these undertakings.

MORE STOCKMEN REQUIRED.

To quote from the editor of a United States agricultural paper: "At the time of our visit grass on the range was four to seven or eight inches high, and the thousands of cattle grazing were fit for the block.

POPULATION OF CANADA AT INTERVALS OF TEN YEARS....1871-1901.

PROVINCE	1901	INCREASE OR DECREASE PER CENT	1891	INCREASE OR DECREASE PER CENT	1881	INCREASE OR DECREASE PER CENT	1871
PRINCE EDWARD ISLAND	103,259	5.34	109,078	0.17	108,891	15.8	94,021
BRITISH COLUMBIA	178,657	81.98	98,173	98.49	36,247	36.4	33,586
THE TERRITORIES	211,649	113.86	98,967	75.33	56,446		60,500
MANITOBA	255,211	67.16	152,506	144.95	62,260	247.2	12,145
NEW BRUNSWICK	331,120	3.06	321,263	0.00	321,233	12.4	285,594
NOVA SCOTIA	459,574	2.04	450,396	2.23	440,572	13.6	387,800
QUEBEC	1,648,898	10.77	1,488,535	9.53	1,359,027	14.0	1,191,516
ONTARIO	2,182,947	3.25	2,114,321	9.73	1,926,922	18.6	1,620,851
CANADA.....TOTAL	5,371,315	11.14	4,833,230	11.76	4,324,810	18.07	3,686,013

POPULATION AND AREA.

PROVINCE	TOTAL AREA...SQUARE MILES	POPULATION....1901	POPULATION PER SQ. MILE (LAND AREA) 1901	INCREASE PER CENT 1891-1901
PRINCE EDWARD ISLAND	2,000	103,259	51.63	5.34
BRITISH COLUMBIA	383,300	178,657	0.47	81.98
THE TERRITORIES	2,535,140	211,649	0.11	113.86
MANITOBA	73,956	255,211	3.95	67.34
NEW BRUNSWICK	28,200	331,120	11.74	3.06
NOVA SCOTIA	20,000	459,574	22.31	2.04
QUEBEC	347,350	1,648,898	4.79	10.77
ONTARIO	222,000	2,182,947	9.94	3.25
CANADA.....TOTAL	3,662,546	5,371,315	1.75	11.18

IMMIGRATION.

NATIONALITY	NUMBER OF IMMIGRANTS ARRIVED IN CALENDAR YEARS		SIX MONTHS ENDED JUNE 30	FISCAL YEARS		
	1898	1899	1900	1901	1902	1903
AUSTRIANS			155	223	320	BRITISH
FRENCH AND BELGIANS	545	418	253	492	654	
HUNGARIANS			370	540	1,048	
GERMAN	503	780	476	984	1,048	41,702
IRISH	733	1,337	343	993	1,311	AMERICAN
SCANDINAVIAN	724	1,520	714	1,750	2,451	
SCOTCH	1,400	747	609	1,476	2,853	
RUSSIANS AND FINLANDERS			1,810	1,726	3,759	40,478
GALICIANS	5,500	6,700	4,002	4,702	6,550	CONTINENT OF EUROPE AND MISCELLANEOUS
OTHER NATIONALITIES	3,832	12,519	1,941	8,024	7,002	
ENGLISH AND WELSH	9,475	8,570	4,129	9,401	13,095	
FROM UNITED STATES	9,119	11,945	8,543	17,987	26,388	37,099
TOTAL	31,900	44,543	23,895	49,149	67,309	123,364

"There is much good stock of all kinds and there are many good stockmen in the Northwest, but there is room and need for more stock, greater diversity, more fertility and humus, fewer acres of wheat and more bushels. It is a big country and a good country, in which men with brains and energy can surely prosper.

"Canadian laws and customs are quite similar to those of this country, and in some respects, as they affect the farmer, even better. The people are courteous, kind, and hospitable, and ever ready to extend a welcome to those from this side the line who go in search of competence and a home."

NORTHERN ALBERTA.

So much has been said and written of Northern Alberta that it seems scarcely possible to put forth anything new. Northern Alberta comprises that great fertile valley stretching from about forty miles north of Calgary on for 200 miles more, past the Red Deer, Battle, North Saskatchewan, and Sturgeon rivers. It is a country well wooded and well watered, where a settler with little means does not need to expend all his capital to provide shelter for himself and his stock. If he has no timber on his own land, he can for 25 cents get a permit from the Government and cut 1,801 lineal feet of building timber, 400 roof poles, 200 fence rails, and 30 cords of dry wood, and put up his buildings. (The same regulations exist for Manitoba, Saskatchewan, and Assiniboia.) As for water, at high points on the prairies, out of the sides of the hills and in the coulées flow springs of water that remain open the year round. The purest water can be obtained at a depth of from fifteen to thirty feet.

The town of Edmonton, which is about the centre of the District, is in latitude 53° 29′ north and longitude 113° 49′ west. It is, therefore, as far south as Dublin in Ireland, Liverpool and York in England, or Hamburg in Germany; farther south than any part of Scotland, Denmark, Norway, or Sweden; and 455 miles farther south than St. Petersburg, the capital of Russia.

SCENERY.

The scenery is of varied beauty. No stern, rugged, and awful mountains, nor long, dead monotony of flat, treeless prairie strain the vision here. Level and rolling prairie, hill and dell, clad in grass and flowers, dotted with groves of aspen, poplar, and spruce, delight the eye. Lakes, lakelets, and ponds reflect the bright blue skies above, and the deep magnificent valleys of the great Saskatchewan and other smaller but not less beautiful water courses lend boldness to a landscape of otherwise ideally pastoral charm.

COAL.

Inexhaustible supplies of coal underlie the whole country and crop out on the sides of the valleys, rendering the work of mining so cheap that the fuel is sold at the mouth of the pit at a nominal figure, whilst it is delivered in the bins of the householders of Edmonton at a very low price.

EDUCATIONAL FACILITIES.

A system of free public schools, the same as exist in all the Territorial districts, has been established. The organization of districts is optional with the settlers. The average cost to the settler for school maintenance is from $3 to $8 a year. The Government liberally supports all public schools.

Religious privileges are fully and freely enjoyed by all denominations. The Presbyterian, Episcopal, Methodist, Baptist, Roman Catholic, Congregational, and Lutheran churches are ably represented by resident and travelling clergymen.

GAME.

Game is either rare or plentiful, according to locality and season. The most plentiful are ducks of many varieties, the grouse (generally called prairie chicken), and the hare, known as the rabbit. To these add, in lesser numbers, geese, swans, loons, pelicans, cranes, partridges, snipe, plover; moose, red, black-tailed, and other deer; and of the furry tribe, too, many of the small variety of wolf, called coyote, a few skunks and foxes, an occasional black or brown bear and timber wolf; badger, ermine, lynx, muskrat, marten, mink, otter, and wolverines.

There are sturgeon, catfish, and trout in the Saskatchewan River; pike, pickerel, carp, and goldeyes occur in that and other streams and lakes. In several lakes, such as Pigeon, St. Anne, and Lac a Biche, the beautiful and nutritious whitefish abound.

[The foregoing will apply with equal force to Manitoba and the other districts.]

SANITARY CONDITIONS.

The water supply is ample and wholesome from a sanitary point of view. The air is clear, pure, and aseptic, containing a large proportion of ozone—the natural air purifier. As to the soil in reference to its influence on health, it is only necessary to say that it does not breed the miasma of malaria, which is the cause of ague in its many forms; nor, owing to the altitude and low mean temperature, can malaria ever exist.

The climate is not only invigorating to adults, whether in full health or otherwise, but seems to have a special influence in developing strong and healthy children. No better climate for children than that of Northern Alberta is to be found in America.

Sufferers from consumption, asthma, chest and throat affections, rheumatism, ague, and many other diseases are always greatly benefited and frequently cured by a residence here.

TOWNS IN NORTHERN ALBERTA.

The most important town in Northern Alberta is Edmonton, with a population of about 5,000. Its situation on the north bank of the Saskatchewan River is an advantageous one. Across the river, on the southern bank, is the town of Strathcona, with a population of 1,500. From both these points settlers find it an easy matter to "make" the outlying settlements.

Another important town is Fort Saskatchewan, twenty-five miles to the east. An excellent district is that lying along the Vermillion River, as are also the Beaver Lake and Birch Lake districts, to the south of it.

Along the Calgary & Edmonton branch of the Canadian Pacific are such important towns as Didsbury, Olds, Innisfail, Red Deer, Lacombe, Ponoka, Wetaskiwin, and Leduc.

RAILWAYS IN NORTHERN ALBERTA.

The Calgary & Edmonton branch of the Canadian Pacific Railway runs in a line almost due north from Calgary to Edmonton. Branches are projected from two or three points along this line, running east and west to connect with the line projected

from the East. The Canadian Northern has its surveys completed for the construction of its line through the fertile belt passing through Battleford and up through the Beaver Lake and Vermillion River districts. Other lines contemplated will open up many new and valuable agricultural districts, besides giving railroad facilities to the large settlements that have already been made several miles from the existing railway. In fact, all through the country lying east and west of the Calgary & Edmonton line, there will be a period of development during this and coming seasons that will be fully equal to anything that has taken place in any of the former history of the settlement of Western Canada's fertile prairies.

RIVERS.

Rivers intersect the entire country, and large lakes of excellent water are plentiful. Some of the more important are the Saskatchewan, Vermillion, Battle, and Red Deer, with innumerable tributaries. The lakes to be mentioned are: Beaver, Birch, Bittern, Buffalo, Wavy, Sullivan, Smoky, Wastok, Star, Greenlaw, Pigeon, and St. Ann. There are many others, which also are important. These show that the sufficiency of moisture, so necessary to farming, is quite assured. There is also ample rainfall in the season when it is most required.

MIXED FARMING, RANCHING, AND DAIRYING.

These are carried on all through Northern Alberta with great success. Wonderful yields per acre of wheat, oats, and barley are reported. Northern Alberta is well suited for ranching, the grass being of luxuriant growth and very nutritious; shelter is easily obtained. In most cases it is necessary to house stock during a portion of the winter season.

Dairying offers a means of paying all the expenses of living and operating the farm. The raising of poultry offers an easy source of profit.

YIELDS IN DIFFERENT SECTIONS IN THE TERRITORIES.

A crop bulletin, issued by the Government of the Northwest Territories, gives the acreage and yield of wheat, oats, barley, and flax by districts, for 1903:

YIELDS IN DIFFERENT SECTIONS IN THE TERRITORIES—Continued.

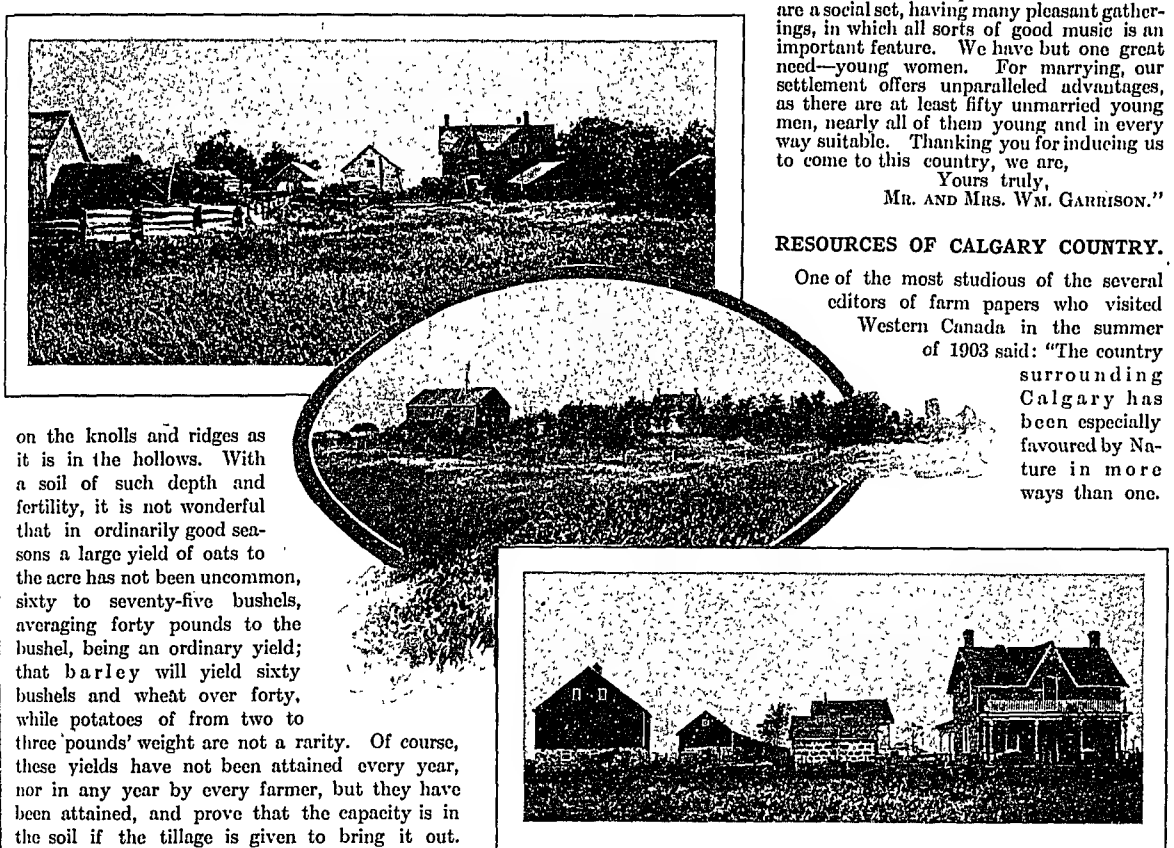
		Crop area in acres	Total yield bushels	Yield per acre	Average per acre, 6 yrs.
DISTRICT No. 1 (Carnduff, Alameda, and Moose Mountain), area 4,716 square miles, includes districts adjacent to the lines of the southwestern branch of the Canadian Pacific Railway and Pipestone extension (in Territories) and the south Moose Mountain country.	Wheat	157,001	3,046,517	19.40	17.41
	Oats	53,498	1,542,626	28.83	21.17
	Barley	4,631	116,729	25.30	25.07
	Flax	15,173	126,774	8.35	.....
DISTRICT No. 2 (Weyburn and Yellow Grass Districts), area 14,638 square miles, includes the country adjacent to the Soo line between Rouleau and Estevan, and the Wood Mountain country.	Wheat	31,396	443,720	14.13	17 56
	Oats	12,238	458,947	37.50	38 01
	Barley	330	7,702	23.33	24.30
	Flax	5,262	53,744	10 21	.....
DISTRICT No. 3 (Moosomin, Whitewood, Wapella, and Broadview Districts), area 3,600 square miles, includes country adjacent to main line of the Canadian Pacific Railway between Fleming and Broadview and the district northeast of Moose Mountain	Wheat	132,888	2,374,874	17.87	17.69
	Oats	36,911	1,104,072	29.84	28 13
	Barley	5,786	140,629	24.30	23.68
	Flax	481	6,975	14.50	.....
DISTRICT No. 4 (Grenfell, Wolseley, Indian Head, and Qu'Appelle Districts), area 5,086 square miles, includes country adjacent to the main line of the Canadian Pacific Railway, and to the Qu'Appelle Valley between Grenfell and Balgonie.	Wheat	173,385	3,923,050	22.62	20.40
	Oats	49,010	1,634,416	33.35	33.51
	Barley	4,903	113,582	23.16	23.64
	Flax	1,672	11,583	6.92	.....
DISTRICT No. 5 (Regina and Moose Jaw Districts), area 15,845 square miles, includes country adjacent to the main line of the Canadian Pacific Railway between Balgonie and Rush Lake, and along line of Qu'Appelle, Long Lake & Saskatchewan Railway, as far as Dundurn.	Wheat	163,740	3,200,500	19.55	22.10
	Oats	45,885	1,753,673	38.21	34.09
	Barley	1,856	47,465	25.57	25.65
	Flax	3,182	31,204	9.80	.....
DISTRICT No. 6 (Crane Lake, Maple Creek, and Medicine Hat Districts), area 37,720 square miles, includes country adjacent to the main line of the Canadian Pacific Railway from Rush Lake to Langevin—almost entirely ranching country.	Wheat	719	13,555	18.85	23.08
	Oats	2,331	94,425	40.50	44.37
	Barley	171	3,423	20.01	29.34
	Flax	58	797	13.74	.....
DISTRICT No. 7 (Yorkton and Saltcoats Districts), area 8,735 square miles, includes country adjacent to the line of the Manitoba & North-Western Railway between Langenburg and Yorkton and the country east of Touchwood Hills.	Wheat	50,306	993,059	19.72	19.01
	Oats	45,020	1,547,968	34.38	35.57
	Barley	2,939	76,975	26.19	26.41
	Flax	2,617	22,880	8.74	.....
DISTRICT No. 9 (Prince Albert District), area 29,808 square miles, includes the country adjacent to the line of the Qu'Appelle, Long Lake & Saskatchewan Railway, from Saskatoon to Prince Albert, and a large unsettled tract.	Spring wheat	60,047	1,085,492	16.43	18.62
	Fall wheat	29	368	12.68	.....
	Oats	32,835	958,181	29.18	30.01
	Barley	6,880	154,506	22.45	24.71
	Flax	2,959	29,227	9.87	.....
DISTRICT No. 10 (Battleford District), area 19,440 square miles, includes the country adjacent to the valley of the Saskatchewan River in the Battleford and Bresaylor Districts with a large unsettled tract.	Wheat	1,913	32,466	16.94	20.28
	Oats	2,025	55,943	27.62	35.28
	Barley	167	4,130	24.76	26.57
	Flax	10	187	18.70	.....
DISTRICT No. 11, area 16,848 square miles, includes the western 14 ranges of townships in the Provisional District of Saskatchewan. First crop in this district.	Wheat	367	7,242	19.74	.....
	Oats	343	13,756	40.10	.....
	Barley	16	446	27.87	.....
	Flax	230	2,320	10.09	.....
DISTRICT No. 12 (Edmonton, Strathcona, and Wetaskiwin Districts), area 48,286 square miles, includes the country adjacent to the line of the Calgary & Edmonton Railway Company from Wetaskiwin north and the settlements along the Saskatchewan Valley, also a large tract of unsettled territory.	Spring wheat	33,634	556,081	16.53	21.06
	Fall wheat	294	3,410	11.60	.....
	Oats	90,899	2,700,956	29.71	34.99
	Barley	25,293	625,664	24.73	26.39
	Flax	523	4,193	8.01	.....
DISTRICT No 13 (Red Deer, Lacombe, and Ponoka Districts), area 13,608 square miles, includes the country adjacent to the line of the Calgary & Edmonton Railway from Red Deer to Wetaskiwin and westward to the Rocky Mountains.	Spring wheat	1,640	30,687	18.71	20.02
	Fall wheat	24	467	19.50	.....
	Oats	23,050	792,630	34.37	35.56
	Barley	5,940	183,111	30 82	28 46
	Flax	11	84	7.63	.....
DISTRICT No. 14 (Innisfail, Olds, and Didsbury Districts), area 11,412 square miles, includes country adjacent to the line of the Calgary & Edmonton Railway from Carstairs to Penhold and westward to the Rocky Mountains.	Spring wheat	443	9,306	21.00	21.43
	Fall wheat	256	4,388	17.14	.....
	Oats	9,955	314,639	31.60	34.37
	Barley	3,922	93,438	23.83	23.18
	Flax	11	172	15.63	.....
DISTRICT No. 15 (Central Alberta, or Calgary District), area 14,796 square miles, includes the country adjacent to the main line of the Canadian Pacific Railway, from the western boundary of the Provisional District of Assiniboia, to the Rocky Mountains, and to the line of the Calgary & Edmonton Railway from Nanton to Carstairs.	Spring wheat	663	12,624	19.04	21 60
	Fall wheat	112	2,621	23.40	.....
	Oats	14,198	531,116	37.41	38.93
	Barley	3,476	86,034	24.75	28.01
	Flax	32	452	14.12	.....
DISTRICT No. 16 (Lethbridge, Macleod, and Pincher Creek Districts), area 11,772 square miles, includes the country adjacent to the line of the Calgary & Edmonton Railway south of Nanton, and to the line of the Alberta Railway, the Crow's Nest Railway and the St. Mary's River Railway.	Spring wheat	23,032	499,316	21.68	22 09
	Fall wheat	2,754	71,532	25.97	.....
	Oats	22,454	776,357	34.57	36.03
	Barley	3,460	86,460	24.99	24 74
	Flax	210	2,255	10.73	.....

AN AGRICULTURAL EDITOR'S OPINION.

After making a tour of inspection, the editor of the Wisconsin Agriculturist said in that paper:

"Within the borders of Northern Alberta is a practically illimitable area of fertile land, well timbered and well watered. The surface of the country is gently undulating, and through the centre of the District the Saskatchewan River flows, from one to two hundred feet below the level. Wood and prairie alternate irregularly. In some parts there are plains free from timber, and in others great areas of woods composed of large trees. The soil consists of a layer of from one to three feet of black vegetable mould, with little or no mixture of sand or gravel. It is peculiar to this section of the country that the black mould is as deep on the knolls and ridges as it is in the hollows. With a soil of such depth and fertility, it is not wonderful that in ordinarily good seasons a large yield of oats to the acre has not been uncommon, sixty to seventy-five bushels, averaging forty pounds to the bushel, being an ordinary yield; that barley will yield sixty bushels and wheat over forty, while potatoes of from two to three pounds' weight are not a rarity. Of course, these yields have not been attained every year, nor in any year by every farmer, but they have been attained, and prove that the capacity is in the soil if the tillage is given to bring it out.

"There is a varied and nutritive pasture during a long season in summer; there is an abundant supply of hay procurable for winter feeding, and an abundant and universally distributed water supply. The climate is clear, equable, and healthful, which makes this a pleasant country to live in. There are very few summer or winter storms, and no severe ones. Blizzards and wind storms are unknown. As a consequence, a fine class of cattle can be raised very cheaply and with small danger of loss."



Typical Farm Homes in Western Canada.

LETTERS FROM SETTLERS.

As nothing so convincing can be published concerning the advantages of a country as the written testimony of actual settlers, a number of letters received from settlers throughout Western Canada have been published in pamphlet form. This pamphlet will be forwarded on request by any of the agents whose names appear elsewhere in the Geography. These men, for the most part, possessed little or no means to start with, but they came, saw, and conquered, and are now, as their evidence shows, prospering. An extract from one such letter, written to the Chicago agent of the Government, follows:

EGG LAKE, ALTA., N. W. T., Feb. 14, 1904.

"We have our claim located, filed upon last June. We are about fifty miles north of Edmonton, in a settlement but little more than eighteen months old. There are many families living near—all English speaking—and we have a school organization and hope to have a good school-house built in the spring. There are three sawmills near. Getting our house put up we moved into it November 19th. We have fine hay land, enough good water, and sufficient timber for building purposes. Coal has been found at the depth of a few feet. We are a social set, having many pleasant gatherings, in which all sorts of good music is an important feature. We have but one great need—young women. For marrying, our settlement offers unparalleled advantages, as there are at least fifty unmarried young men, nearly all of them young and in every way suitable. Thanking you for inducing us to come to this country, we are,

Yours truly,

MR. AND MRS. WM. GARRISON."

RESOURCES OF CALGARY COUNTRY.

One of the most studious of the several editors of farm papers who visited Western Canada in the summer of 1903 said: "The country surrounding Calgary has been especially favoured by Nature in more ways than one. The whole district is watered by many beautiful timber-fringed rivers, all clear, swift-running streams, fresh from the snow-capped Rockies, which form an enchanting background to the scenery of the district. The foothills and prairie surrounding the city are covered with a profuse growth of the rich and nutritive grasses on which cattle feed and fatten the year round and which have made Alberta beef famous. Most of the land in the district within a radius of fifty miles of the city is capable of producing all grains, roots, and vegetables in great quantity and of first-class quality.

"The facilities in the neighborhood of Calgary for mixed farming are such as to assure to the industrious man not only a good living for himself and family but the certainty of saving and adding to his possessions until he becomes comparatively wealthy.

Who Will Succeed in Western Canada.

The first great demand is for persons with some capital at their disposal. For this class Western Canada affords unlimited openings. They can engage in agricultural pursuits, taking up free grant lands, buying railway lands, or purchasing the improved farms to be found in advantageous positions; or in mining; or in the manufacturing industries. For those possessed of a settled income, living will be found exceedingly cheap, with the benefits of a fine, healthy climate, magnificent scenery, abundant opportunities for sport, and facilities for education and placing children in life not to be excelled anywhere.

HOW TO GET EXPERIENCE.

It is not essential for young men, wishing to take up farms in Canada, but desiring before doing so to acquire knowledge of agriculture, to pay premiums. Strong and healthy young men from eighteen to twenty-one years of age, who are prepared to accept for a time the hard work and surroundings more or less inseparable from a farm labourer's life, have no difficulty in getting employment in the spring; and the agents of the Government in Canada will assist them as far as possible in doing so, without charge, although, of course, without accepting any direct responsibility. Being without experience, they will not get much wages at the outset, but they will be able to command increased remuneration in proportion to the value of their work.

Young men, single, who come in March, April, or May, with less than $25, looking for positions as farm labourers, will find a list of applications from farmers in all parts of the country who want hired help, at the Dominion Immigration Office, Winnipeg. It is much wiser for the newcomer to stay for the winter with a farmer, in a comfortable home, though the wages be only a few dollars a month, rather than go to the city or town expecting to get a job. There are opportunities, however, on the approach of winter, to join camp outfits that go to the bush in various parts to cut firewood or get out ties and sawlogs. Experienced axemen make good wages at this work, and return in the spring to labour on farms. Any careful young man can, from the beginning, earn and save enough each year to make payment on say 160 acres of land, as payments are spread over ten years.

Besides the help required in the harvest fields there is a demand each season for strong, able-bodied men, accustomed to hard work, on railroad construction.

The wages for female help in farmers' homes would vary from $6 to $10 a month. The experience of many farmers' wives has been that their servant girl is most likely, before many years pass, to get married to a neighbouring farmer and become mistress of her own home.

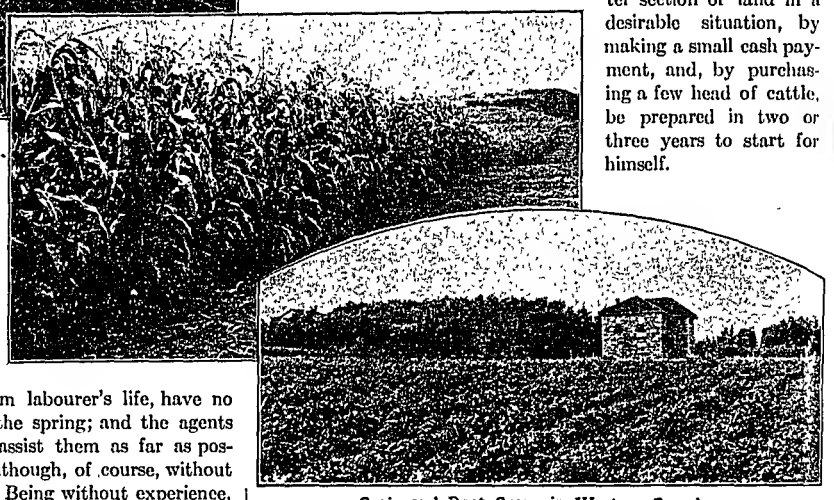
MARRIED MEN WITHOUT CHILDREN.

It is generally easy to find a situation for a married man without children, when husband and wife are both willing to engage in work; the husband as farm labourer, the wife to assist in the housework, or, in many instances, they may find work with a bachelor, when the wife takes full charge of the housekeeping.

It is not so easy to find a situation for a married man with two or more children, as at present few farmers have a second house on the farm to accommodate such a family, and the farmhouse is not large enough to accommodate two families.

YOUNG MEN WITH $250 OR LESS.

It is hardly possible for a young man with less than $250 to start farming on his own responsibility. Better far to work for wages a year until he learns the value of things as well as the methods of farming. In all probability he would, before the end of the first year, get an opportunity to purchase a quarter section of land in a desirable situation, by making a small cash payment, and, by purchasing a few head of cattle, be prepared in two or three years to start for himself.



Grain and Root Crops in Western Canada.

WHAT CAN BE DONE WITH $500.

A newcomer with $500 could homestead 160 acres at once, and put up a house thereon, as well as do the other necessary homestead improvements and then go out to the older settled districts during the other six months of the year, which would tide him over a second six months of homestead. In three years his homestead of 160 acres would be his own.

THE MAN WITH $1,000.

Any single man, or married man with or without family, can make a fair start with $1,000 capital. He can either homestead or purchase land, making payment on the installment plan to cover a period of ten years. A small house would be required, also some outbuildings for horses, cattle, swine, and poultry. A waggon, plough, and harrows would be purchased. A couple of months might well be devoted to working out in harvest and threshing, earning some money to help him over the winter. Anyone who has from $500 to $1,000 cash would do well to

rent the first year. Many of the farms to rent have a house and stable thereon, and the owner is often willing to supply seed, and sometimes implements, taking a share of the crop in return; or, the newcomer can purchase everything necessary, putting in a crop of 100 to 150 acres, and after seeding have two or three weeks to look about in selecting a permanent home.

CAPITAL MEANS OPPORTUNITY.

The settler who comes with considerable money, or money with a carload of stock and household effects, is one, two, or five years ahead of the man who comes with but little means, for he is at once able to place himself in a good settlement, buy what he wants cheap for cash, and push vigorously.

It is never wise to invest all the capital a settler brings with him the first year. Better place some money in a bank as a nest egg for use in emergency, or if a specially good offer presents itself during the year he can purchase either land or stock.

AS TO BUYING LAND.

First: Never purchase without a personal inspection.

Second: The nearer you are to a railway station as a market, the more valuable the land is, and the more its value will increase in the future.

All other things being equal, land not more than five miles from a station would be valued, say, at $10 per acre; land at from five to ten miles would be valued at $7.50, and from ten to fifteen miles, somewhat less. Prices are increasing as the demand increases.

Hauling No. 1 Hard Wheat to Market.

If an intending settler has any friend or acquaintance he should by all means write to such an one, stating how he is situated and what he would like to do, either in the way of securing a situation, renting a farm, or purchasing one.

If the intending settler knows no one, he should purchase ticket to Winnipeg only, and on arrival there call upon the Commissioner of Immigration at Winnipeg, when every assistance possible will be given to locate him.

THE TIME TO EMIGRATE.

Generally speaking, the best time to emigrate, for all classes, is the early spring. The agricultural labourer will then find his services in demand in the busy period that always comes during seed time; and the farmer who intends to take up land for himself will arrive at the beginning of the season's operations. The farmer may, by getting in a crop of oats or potatoes during the month of May or the first week in June, contribute greatly to the support of himself and family during the first year. Or again, if the agricultural labourer arrives in summer, about harvest time, he will find great demand and high wages for his services during the harvest months, and he will have no difficulty in getting on well from this point. The farmer, too, who desires to take up land, if he comes in the summer time, may see the crops growing, and may thus have an opportunity to choose at leisure the most advantageous location. The summer and autumn months are the best for moving about the country in search of land—or, as it is commonly called, "land hunting"—for a suitable spot on which to settle. Having selected it, he may proceed to erect his house and make preparations for the winter; and, if he means to do this, he will find it a great advantage in the spring to have been early on the spot.

WHAT TO BRING.

Many of the household necessaries which the emigrant possesses he might do well to bring, but still it is advisable to consider well the weight and bulk, and how far it is worth while. Articles of household furniture, crockery, stoves, or heavy articles of hardware should be left behind or sold, except in some circumstances, for special reasons, which the colonists will consider.

Mechanics and artisans, when they have been encouraged to come out, may of course bring their tools; but they must bear in mind that there is no difficulty in buying any ordinary tools in Canada at reasonable prices.

Settlers from the United States can secure their own cars at very low rates, or a car can be hired by one or more settlers, in which case it is better to take along the stock one owns. But do not buy new stock, as stock of all kinds can be had at reasonable prices, and they can be purchased on arrival. Machinery unsuited to farming in Western Canada should not be bought, but the settler should first of all bring his bedding and clothing.

WOMAN'S HELP NEEDED.

Canada is a man's country, from the fact that all new countries first attract men, who are more adventurous and better fitted for pioneer life than women. In Manitoba there are 21,717, and in the Territories 57,851 more males than females. There is an increasing demand for woman's help, and especially for servant girls. The farther west you travel the greater the scarcity, and with the demand, the compensation is increased.

GETTING A START.

Persons of small capital and inadequate knowledge of agriculture often desire to enter upon farming pursuits. Before this is done experience should be acquired, either by hiring oneself out as a labourer or gaining experience in some other way. Then when the necessary knowledge has been obtained, a farm may either be rented, purchased, or taken up as a free grant.

CLERKS, SHOP ASSISTANTS, AND PROFESSIONAL MEN.

Clerks, shop assistants, and persons desiring such situations are advised not to emigrate unless proceeding to appointments already secured or to join friends. Encouragement is not held out to professional men, especially in cases where immediate employment is desired.

ADVICE BY AN OLD SETTLER.

John Beggs, an old settler of Arcola, Assa., writing to a local paper, says: "Do not be in too great a hurry to make money for the first year or two, but make up your mind to go carefully and feel your way for a short time. A person who is unaccustomed to prairie farming, and is limited as to means, had better if possible obtain a good homestead, which he can secure upon very easy terms, and if he has not sufficient money to enable him to stock and equip it on the start, I would suggest his procuring work with a farmer, which is easily obtained at good wages. He can work in this way for six months of each year and put in the balance of the year on his homestead. A great many people coming in here feel that they are losing time while doing the residence duties on a homestead unless they are in a position to buy horses and machinery to work continually on the land, but if they would only stop and think they would remember that at the end of the three years which they are required to put in, they have a clear title to 160 acres of land, worth at least $1,600, or in other words, for each month they are required to reside upon the land they have accumulated a title to $90 worth of property, which can be converted into cash at any time, if so desired."

Expert Opinions of Western Canada.

It is in view of the exceptional weight attaching to the opinions of farmers, agricultural editors, and business men from the fertile farming areas of "the States," whose judgment can not be in any way biased in favor of another country than their own, that the following matter is presented.

SPYING OUT THE LAND.

Three editors of the American Agriculturist recently made a 4,000-mile tour through Manitoba, Assiniboia, Saskatchewan, and Alberta. Their report of what they saw, after referring to the adaptability of Western Canada for the growing of small grains, and to the excellence of the stock, says: "Among the settlers are many from the United States. Such rapid development as we saw is only possible in a country blessed with a fertile soil and a prosperous people. The future of Western Canada is full of promise. Rapid and substantial development is certain. When the newer parts of the United States were settled, they had much to contend with. There were no railroads, consequently no markets. With the settlers in Canada everything is different. Railroads have preceded them, furnishing at once a market and means of securing the comforts of modern farm life."

PRIME GRAZING COUNTRY.

"Grass is one of the notable things about all the landscape of Western Canada," says Henry F. Thurston in the Farmers' Review (Chicago). "There is thus not a mile of this country that can not be used for some agricultural purpose—either for tilling or ranching. Stories were told the writer of men who, last year, cleared from their wheat crop more than the land on which it was grown originally cost them. This is easy to believe, in view of the large crop and high price for wheat last year."

CANADA'S MARVELLOUS CLIMATE.

We should not lose sight of the influence of the rains; the total average rainfall for the season is but 13.35 inches for the Territories, and 17.34 inches in Manitoba, and the amounts falling between April 1st and October 1st are respectively 9.39 inches and 12.87 inches or about three-fourths of the entire rainfall. From the middle of June to the middle of July there are over two hours more daylight in every twenty-four hours than in Nebraska. Prof. Thos. Shaw of Minnesota, than whom there is no better authority, says: "The main reason why Western Canada wheat grows to such perfection consists in the longer period of sunshine it gets each day."

We saw more and larger bands of cattle and sheep grazing in Assiniboia and Alberta than we ever saw on the western plains of the United States. One band of cattle numbering 5,000 head were grazing on the rich grass, and sheep without number.—*H. E. Heath, in Nebraska Farmer.*

VAST AREA OF WHEAT LANDS.

"The wheat-growing districts of Western Canada," says the Orange Judd Farmer, "are unrivaled in the production of grain. In these districts there is length of season and ample rainfall to secure the crop under ordinary conditions. During the year 1902, 50.7 per cent of all the wheat officially inspected at Winnipeg graded No. 1 hard, and 30.6 per cent No. 1 northern, making 81 per cent of the total receipts falling within the two highest market grades. During practically the same time only 1 per cent of the receipts at Minnesota were hard and 22 per cent No. 1 northern, or 23 per cent of the total receipts represented the two highest gradings."

WESTERN CANADA'S POSSIBILITIES.

"The tide of immigration which is pouring into the northwestern territories of Canada, and which is being very largely recruited in the central valleys and northwestern states of this country," says B. W. Snow, in Farm and Home, "makes a presentation of the agricultural possibilities of this new land of timely interest to American farmers. The character of the winters may perhaps be best appreciated when it is understood that cattle, both on the range and on the homestead, remain without shelter the year around, and ordinarily without feed, except as they rustle for themselves."

PROMISE OF THE NORTHWEST.

The Indiana Farmer (Indianapolis, Ind.), in its issue of July 25, 1903, says: "The developments of recent years have shown that extending far into Manitoba and the Northwest Territories, there is an area of millions of acres adapted to the growing of the finest wheat in the world, and of this immense area only a small portion, relatively speaking, has as yet been turned by the plough. All things considered, we look upon this region as one of great promise. We do not see how it can fail to become one of the most prosperous regions in the world, and that in the near future."

CHARACTER OF THE EDMONTON COUNTRY.

"We were strongly reminded," says the editor of the Farmers' Call (Quincy, Ill.), in speaking of the Edmonton district, "of the famous Mendon Prairie in western Illinois.

"The farming country about Edmonton differs from the open prairie in that it is slightly rolling and is not destitute of timber, giving ample wood for fuel, building, and fencing. The soil is a rich, black loam, almost altogether free from stones. Springs, creeks, and small lakes abound. There is a rich growth of grass, such as makes Northern Alberta an ideal cattle-raising district. Oats and barley do exceptionally well, the former running from forty to forty-five pounds to the bushel. That wheat can be successfully grown here is proved by the number of local grist mills running day and night, grinding the wheat of this district to supply home consumption."

WESTERN CANADA A LAND OF HOMES.

"Western Canada is a vast region of excellent farming lands," says the Farmers' Call (Quincy, Ill.), July, 1903. "It is a great empire of material wealth, of progressive institutions, of religious and political liberty, of robust and of poetical thought, and of people and ideas akin to our own. Canada is a country of full stomachs, of secure homes, of free schools, of liberty. True, it is a country of wheat and oats and grass and cattle, but we thought most of it as a land of homes—homes for the enterprising and strong-hearted people from 'the States,' that otherwise might not be able to get homes."

WHEAT LANDS ATTRACT THOUSANDS.

"Agricultural chemists who speak with authority," says a writer in the Springfield (Mass.) Republican, "declare that even the black earth of central Russia, hitherto considered the richest soil in the world, must yield the palm 'to the rich, deep, black soils of Manitoba and the Northwest Territories.' The very qualities and chemical ingredients needed for the production of the finest wheat are possessed in their highest state by these soils. The air is dry and healthful. Fuel is cheap. In Alberta, Assiniboia, and Saskatchewan, the farmers have but to drive to the open coal banks along the Saskatchewan River and fill their wagons.

"The American who crosses from the States into Canada finds little or nothing to remind him that he has passed from a republic to a monarchy, or the colony of a monarchy. He is hampered by no more numerous restrictions; if anything, by less. The things by which men are rated are the same—honesty, ability, and the willingness to work hard."

View at King and Yonge Streets, Toronto.

HIGH PRICES FOR FARM PRODUCE.

"The farmer in the Canadian Northwest," writes the editor of the Farmers' Call (Quincy, Ill.), "gets a higher price for his wheat—perhaps two cents per bushel more on the average—than the farmer in the northwest of the United States in the same longitude. Considerable numbers of cattle of the Canadian Northwest are good enough for the export trade—are as good as the cattle of Illinois or Iowa."

MORE EVEN SOIL THAN IN IOWA.

The wheat belts, although colder than the ranching country, are ideal districts for wheat growing. The cool nights during the ripening period favours the production of firm grains, thus making the wheat grade high in the market. Wherever wheat is grown, oats and barley grow, producing large yields. The pastures are good. Aside from the wild grasses, brome grass and western rye grass furnish good hay crops and are grown not only where mixed farming is in vogue, but in the wheat districts as well. The soil, like our own in Iowa, varies in different sections of the country; still it is more uniform. We met a number of Iowa farmers during our trip, who are among the new settlers. They were contented and prosperous. —*Farmers' Tribune, Des Moines, Iowa.*

CANADA FED BY "THE STATES."

Various are the reasons which impel Americans to take up their homes in the Canadian Northwest. Undoubtedly the country is extremely rich agriculturally. The finest kind of wheat can be grown and in large quantities. All kinds of live stock can be raised, and the profits of dairying are excellent.

Manitoba has many examples of farmers who have risen to comparative affluence in a few years. Here is the case of an Austrian who arrived in Assiniboia in 1800. His assets were an industrious disposition, a wife, six children, and $600 in cash. To-day he owns 640 acres of land worth $6,000, not to mention fifteen horses, twenty-seven cattle, twenty-five pigs, eighty sheep, and a complete set of farming implements.

From Alberta comes the story of a man whose capital six years ago was $300. In 1902 he sowed fifty acres in wheat, which yielded him 1,500 bushels; 100 acres of oats, which produced 4,000 bushels, and four and a half acres of potatoes, which gave him 1,020 bushels. For these he received $2,700, of which $2,200 was profit. —*Chicago Chronicle.*

AN UNPREJUDICED OPINION.

The recent rush of Americans to Canada is quite natural. They have discovered that you have a good thing of it over here, plenty of fine, fertile land at cheap prices, and free grants to settlers, and they wanted to be in on the ground floor, like everybody else, and here they are. We have had some Canadian settlers in the past, and now you are getting even and getting back.—*Frank C. Sargent, United States Commissioner of Immigration, Washington, D. C.*

WAGON-TRAIN IMMIGRATION.

The exodus to Canada from the Western States continues. On every train there are delegations leaving for the Promised Land. Not all of those, however, who are journeying to the new agricultural Eldorado, are going by train. The overland route is as popular as ever. Barring accidents, the wagon trip from Great Falls to Calgary can be made in ten days, and with a light covered wagon, drawn by a good team of horses, a tent, a bed, and a camp cooking outfit, the hardened plainsman of Montana wants no better way of making the journey to Canada.

Those who have taken the overland route report that the season of 1903 has been particularly favourable for that mode of travel, the frequent rains this summer having made grass everywhere, so that it is no trouble to find good camping places.

It is with the view of getting good feed for his horses, that the overland traveller selects his camping place at night. Of course, there is the question of water and wood for the camp-fire to be taken into consideration, but first of all the traveller thinks of his horses, for he depends upon them to carry him along.—*Great Falls (Montana) Daily Leader.*

EMIGRATION FROM THE UNITED STATES.

A special staff correspondent of the Chicago Tribune, writing from Rosthern, Saskatchewan, N. W. T., in July of last year, says: "The American invasion of Canada is no mere figure of speech. The tide of immigration now sweeping into the Northwest Territories is a movement of population comparable only to the great waves which for four generations swept the States from the Atlantic to the Rockies. The United States becomes for the first time a country of emigrants as well as immigrants, and is giving her northern neighbours experienced farmers, intelligent, trained in western agriculture, good citizens, the thrifty, progressive sons of the men who turned the raw prairies into an agricultural empire, and who now seek new homes with a patrimony of money and experience which their fathers lacked."

UNITED STATES AND CANADA.

In speaking of the social conditions in Western Canada, Mr. T. L. Knappen, associate editor of the Minneapolis Journal, says of the people of Canada: "We can fraternize and mingle with them more agreeably than any other people in the world. At dozens of points railway trains cross the frontier with scarcely any more delay than in passing State or provincial lines.

A Herd of Canadian Shorthorns.

"And the lands themselves are attractive. I have no doubt that as wheat lands the acres north of the 49th parallel average better than those south, both in quantity and quality of yield."

PHENOMENAL DEVELOPMENT OF CANADA.

A new nation is being born under our very face and eyes. Things are shaping faster in Canada than most of us here in the United States realize; indeed, faster than Canada herself realizes. The Northwest of Canada is rapidly filling up with a new life from Eastern Canada and from our own Northwest. Farmers in Iowa, Kansas, Nebraska, Minnesota, and the Dakotas are selling their valuable farms and are moving, with their families and farming implements and live stock, up into this great harvest field, and are receiving a most generous welcome.—*Saturday Evening Post, Philadelphia, Pa.*

MANITOBA IN THE WORLD'S WHEAT MARKET.

On the occasion of Sir Wilfrid Laurier's visit to the Corn Exchange, London, England, Colonel Montgomery, V. D., made several important statements.

"When it is borne in mind," he said, "that 80 per cent of the breadstuffs of this great country has to be brought from abroad, you will readily appreciate with what great satisfaction we view the large and steadily increasing supplies of grain which are annually available for export from Canada, and I challenge contradiction when I say that of the wheats we import from Russia, India, the Pacific, and the length and breadth of the United States, none gives more general satisfaction, none is more generally appreciated, than that raised in the Province of Manitoba.

"We look forward with confidence to the time at which, with the present rate of progress, the Dominion of Canada will have a sufficient surplus of wheat to render this country independent of other sources of supply."

"CANADA IS FORGING AHEAD."

Canada is forging ahead more rapidly than any other nation. The Dominion has outstripped the rest of the world in the rate of export trade increase during the last ten years. The estimated value of the cereal production of the Canadian Northwest for 1903 is about $55,000,000, taking no account of other items, such as general agriculture, dairying, and ranching. But the sum is a handsome one, and its importance is emphasized by the additional fact that it will be distributed within an area the total population of which is less than 500,000.

Yet this figure is not quite fairly representative of the cereal crop of the district. Wheat is a cash crop, and will bring in this year nearly $45,000,000. But there remain some 10,000,000 bushels of oats, and 11,000,000 bushels of barley. These, at present market prices, represent a value of about $12,000,000. But only 10 per cent of this is sold. The rest is used at home by the farmers as feed for their stock. By that process it is converted into a value which can not well be estimated, but which is far beyond its market value as a cereal. —*New York Sun.*

Outlook for the 20th Century.

CANADA'S AGRICULTURAL DEVELOPMENT.

Mr. C. W. Peterson, formerly Deputy Minister of Agriculture for the Territories, says: "I do not claim to be an old-timer in this country, but I can distinctly remember when the idea of growing wheat west of Moosomin was regarded with ridicule. During the year 1903 about 14,000,000 bushels were raised west of that point, with an average yield of about twenty-five bushels per acre.

"There are some 193,000,000 acres, over 300,000 square miles of land available for free grazing in the Northwest Territories. On this enormous extent of country about 200,000 head of sheep, 600,000 head of cattle, and 175,000 horses are at present pastured. No higher tribute could be paid to the Canadian North-

west as a grazing country than the statement that all cattle and sheep exported are consigned to their final destination without any grain-finishing process, a procedure which would be absolutely impossible in any State of the Union."

ACTIVITY IN WESTERN CANADA.

A correspondent of the Toronto Mail and Empire says: "Where formerly existed struggling settlements, isolated from the world by an ocean of untilled prairie, are now prosperous communities, with banks, real estate offices, lawyers, insurance brokers, and all those other commercial luxuries. Where formerly only one small elevator did duty for a shipping point, there are now often five, six, or even more. It is farmers, strong, raw-boned farmers from Kansas, keen-eyed farmers from Iowa, quiet but observant farmers from Ontario, earnest though inexperienced farmers from the motherland—it is these men in their thousands whose daily toil and aggressive energy are moving the centre of Canada westward.

"The American propaganda has been on about the following lines: John Jones of Minnesota owns 100 acres of land from which he can raise a fair average crop of say sixteen to twenty bushels of wheat of mixed grades. His land is readily saleable at $40 an acre. It is pointed out to him that with the proceeds of such a sale he can buy in this country 400 acres of better land, equally close to railway, school, and church, and capable of yielding twenty to thirty bushels of better wheat to the acre. John Jones comes up to see, and seeing, buys. It is claimed that with favourable conditions and careful farming a man may make the cost of his new land out of one season's crop, setting an acre of crop against the acre of land upon which it is grown."

OPTIMISTIC ABOUT CANADA.

Mr. Beecher-Smith, Y. M. C. A. representative, unhesitatingly speaks with the greatest confidence of the future of Canada:

"I believe Canada will have a great future, especially when it is more advantageously served by the railways. At present the country is on the eve of important railway developments.

"As an illustration of the favourable opportunity many districts offer to settlers, here is an actual case. A certain field near Moosomin averaged twenty bushels to the acre and the grain sold at 72 cents on the market here. Right alongside of this farm is lying wild land which can be purchased at $7 or $8 per acre. This average is a very moderate one, and yet it will be seen that in two years, at the most, the purchaser would be able to pay for his land, pay all expenses of working it, and have something to his credit."

THE WAVE OF IMMIGRATION.

The impetus, which amounts to a moderate boom, is not the result of any sudden, impulsive, Eldorado suggestion, but is the natural effect of the persistent campaign of advertising that has been carried out for years. The tide of immigration is higher now than ever before, and rises month by month and week by week with a relentless regularity. Railways and steamship lines are unable to handle the traffic. Special after special brings its multitude of eager, hardy home-seekers. Freight trains, heavily laden with settlers' effects, crowd the tracks. The steamships leaving Europe for Canada are overcrowded, and many, unable to secure passage for Canada direct, come via New York and Boston. Still they come, and promise to come, their faces turned westward, where free farms are to be had.

'On to Canada!" That word seems to have been caught at the same time by many scores of thousands in Europe, in the United Kingdom, in the United States, and taken as the signal for a concerted advance into the great plains of our Northwest. —*Old Country Correspondence.*

EXPERIENCE OF A SETTLER.

FOAM LAKE, ASSINIBOIA, N. W. T.

The spring creek at my place has been running all winter, so that the cattle have water any time they care to drink. The land around here is partly covered with scattered bluffs of poplar and willow—just enough for fuel and protection for the cattle and horses, the latter living on the prairie all the year round. Water has been found at most places at a reasonable depth and of good quality. My well is fourteen feet deep, and I have plenty of good water.

As to the climate, the summers are cool at night, making it an ideal place for a good night's rest. The winters are not nearly so severe here as in South Dakota, as we have bluffs for protection. During ten years' residence I have not had my grain or potatoes damaged by frost. As for grain growing and ranching, I do not think this country has an equal in America.

My oats, last year, averaged one hundred bushels to the acre, and wheat to the acre averaged fifty bushels.

Yours truly, FRANK BRAY.

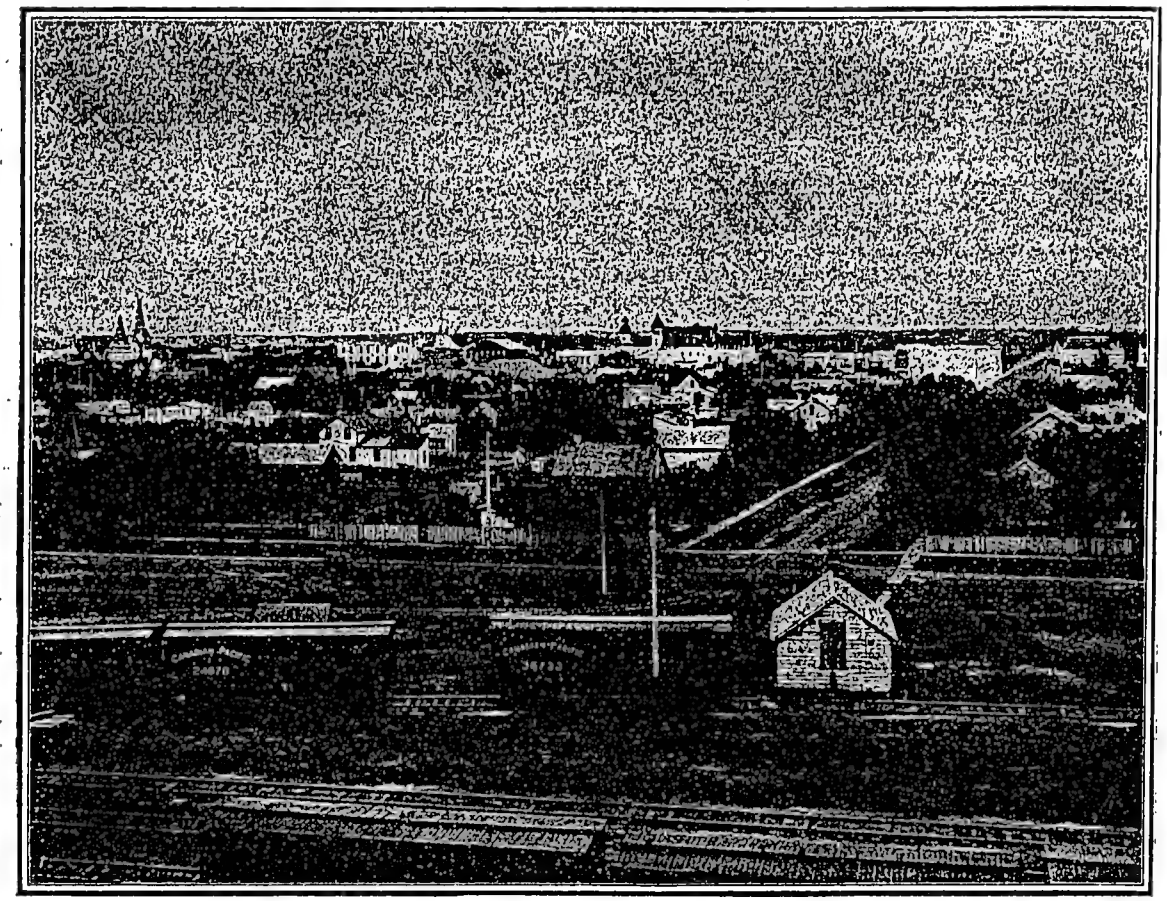
Temperature in Western Canada.

Table showing the average winter, summer, and annual temperatures at various points in the Canadian Northwest, taken from the official reports of the last ten years.

STATIONS	MEAN TEMPERATURE		
	Summer	Winter	Year
Northwest Territories—	deg.	deg.	deg.
Battleford	62.3	1.3	32.0
Banff	51.6	17.0	34.6
Chaplin	65.0	3.3	35.7
Calgary	58.8	13 9	37.4
Edmonton	59.3	8.8	35.9
Indian Head	62.9	2.2	38.0
Moose Jaw	61.6	5.3	33.9
Medicine Hat	63.7	12.5	39.9
Pincher Creek	58.8	22.5	38.9
Parkland	59.6	4.5	30.5
Prince Albert	59.5	2.1	30.7
Qu'Appelle	61.6	1.6	33.4
Regina	62.7	0.9	32.5
Swift Current	63 5	9.8	37.6
Brandon	63.1	0 1	33.1
Emerson	64.2	2 9	35.3
Winnipeg	66.0	0 9	33.3

Statement of the daily mean temperature in the months of November and December, 1903, and January, 1904, at Edmonton, Winnipeg, Calgary, and St. Paul.

DATE	EDMONTON			WINNIPEG			CALGARY			ST. PAUL, MINNESOTA		
	Nov.	Dec.	Jan.	Nov.	Dec.	Jan.	Nov.	Dec.	Jan.	Nov.	Dec.	Jan.
1	57°	38°	9°	50°	4°	-17°	47°	41°	4°	51°	17°	2°
2	54	35	4	54	25	-20	48	37	5	55	19	-9
3	36	27	19	50	21	-17	34	27	18	54	37	-9
4	35	23	21	39	1	-3	31	28	16	51	19	3
5	43	19	21	26	4	13	38	10	16	36	11	14
6	41	27	34	35	7	10	43	37	31	34	22	17
7	36	29	35	48	2	30	38	28	39	43	20	33
8	27	37	34	37	-1	21	26	41	37	53	14	28
9	31	38	29	31	9	12	29	39	34	48	14	21
10	28	32	13	29	5	21	28	33	25	37	8	21
11	20	11	18	27	-1	16	17	13	29	38	5	21
12	14	-6	17	20	-16	-4	13	11	18	36	6	24
13	10	-5	25	20	-17	-6	5	-7	32	29	-12	6
14	0	7	7	15	-1	3	2	0	31	24	-3	11
15	-1	17	-10	12	-8	10	-5	22	15	31	1	23
16	3	17	-8	0	-9	-3	-6	28	7	28	8	7
17	-2	26	-15	4	5	-9	-8	23	-5	12	11	10
18	-2	23	-13	6	18	11	-8	16	-8	11	26	18
19	1	18	-16	1	16	-8	-2	16	-13	15	29	19
20	5	18	-7	11	4	-16	12	25	-1	24	26	10
21	9	23	8	23	1	-9	3	24	17	36	28	16
22	11	29	5	16	9	-6	28	30	20	26	11	16
23	21	28	-12	4	16	-25	18	25	10	24	24	-10
24	19	34	-6	-11	-1	-33	18	32	3	12	20	-23
25	28	43	-4	-16	-22	-26	26	42	0	14	0	-23
26	32	43	17	2	-1	-26	30	37	25	0	-2	-18
27	36	32	19	21	-3	-17	34	31	32	23	15	-12
28	30	29	30	22	3	-12	25	21	26	31	11	-5
29	30	32	36	13	-7	2	30	38	35	23	2	-1
30	30	32	34	-6	7	5	38	32	31	19	8	11
31	....	19	18	....	-1	-8	....	22	33	....	19	9



Portage la Prairie, Manitoba.

Hints to New Settlers.

HARTNEY, March 3, 1904.

Dear Sir:

I see by this clipping from the Winnipeg *Telegram*, which I enclose, that there is an interest taken in the comforts of life for new settlers in the West, and as I have been interested in it personally for fourteen years and have not only planted homes for myself and family, but have been instrumental in getting many settlers in by advising them and lending some money to come and showing them how to build a good sod stable, too, I beg to offer you my plan, hoping it may help others as it has done many here in this locality; that is, for a stable 27 feet square inside I take sods ploughed from sloughs, 12 inches wide, 4 inches thick, cut 2 feet long, and thus I make a wall 3 feet thick, making the stable 30 feet square outside, 8 feet high. I take four 6 x 6 timbers, 12 feet long, for posts, set them 9 feet for equal stalls, put on four plates for upper end of poles, set poles on the wall, making a cottage roof with a small window in top on south side at peak. Two doors in south side with a glass in for light; thus I have with brush on to keep the sods or for sheeting with two sods thick and dirt on top it will turn nearly all the rain we have, with care to get dirt out of the well or cellar. We have stables here ten years old and we built a stone stable last summer, but prefer keeping the horses and stock in the sod, as it is dry and warm. I used one side for a granary on starting, and I think it is the cheapest and most economical stable that can be built for a new settler. It only cost six posts, five stringers, and poles about two waggon loads, with brush and a few boards for a door.

I have just returned from a two months' tour to California and through the Middle and Southern States as far as New Orleans, and I found many young men who would like to join us in filling up this great Northwest. I may go up to the Saskatchewan or southwest of Battleford district this spring or summer and take a homestead, or buy some C. P. R. land if it suits my fancy, but I have every confidence in the West, and only get a good garden and fields of wheat and comfortable buildings and I find the people are contented and happy. Everyone thinks he has the best place on the face of the earth.

Yours truly,

[Signed] A. N. MULLETT.

DETROIT FREE PRESS, Wednesday, January 9, 1904:

A GREAT COUNTRY FOR YOUNG MEN.

CHARLES H. GAGNIER PRAISES CANADIAN NORTHWEST.

He Has Been Ranching There for the Last Two Years.

Brown as a berry and weighing almost 200 pounds, Charles H. Gagnier, a former employe of the Detroit Free Press, returned to this city yesterday from the Canadian Northwest, where he has been conducting a ranch for the last two years. Mr. Gagnier is enthusiastic over the prospects of the Northwest Territory and declares that many a fortune will be made there within the next

few years. His ranch of 160 acres is situated at Markerville, Alberta, by the Red Deer River, and near there are the families of Horatio Kelly and James T. Clark, both of Detroit. In the vicinity are sixty families from the States, who left here a few years ago and are now well on the road to prosperity. Mr. Gagnier stated all those who have taken up homes in that district are contented and happy in the prospects of a successful future.

"The Canadian Northwest is a great country for a young man, and offers large opportunities for all," said Mr. Gagnier yesterday afternoon. "All that is required is a close attention to work and success is assured. Not only that, but the returns on a small investment are big. The country itself is delightful and the land is fertile. Of course, cattle raising is the chief industry and it is the one that bring the most money. In that territory a milch cow will bring as high as $50, while a three-year-old steer is worth almost as much. It costs very little to feed the cattle, and my experience has been that they pay 100 per cent on the original investment. Why, one cow will give cream that yields from $25 to $30 a year profit. The cream is sold to the Government creameries, and sometimes as high as 20 cents a quart is paid for it.

"Oats and barley are sure crops. Fall wheat is raised with uniform success. Calgary and Edmonton are the two principal cities in the Northwest and both are booming. Edmonton has about 8,000 people, while Calgary is not so large."

Mr. Gagnier came home for the Christmas holidays, but he expects to return to his ranch in a few months.

Northern Ontario

("NEW ONTARIO")

"New Ontario" is that portion of the Province of Ontario lying west of the Upper Ottawa River and its tributary lakes, north of Lakes Huron and Superior, and extending to the eastern boundary of the Province of Manitoba on the west, and James Bay and the Albany River on the north.

Overlooked up to a few years ago, "New Ontario" has proved on recent investigation to be in reality one of the richest portions of the Dominion. Large tracts of valuable pine hitherto unknown have been discovered, and there are large areas of land requiring only to be cleared of timber, at once valuable as it is cut, to be equal to the wheat lands of Southern Ontario.

To gain accurate and detailed knowledge of these parts of the Province, experts were sent out for scientific examination, and practical agriculturists for their views as to the possibilities of the land for farming. The results of these extensive explorations have fully justified the most sanguine expectations in regard to the natural wealth and fertility of Northern Ontario. In the eastern part of the territory north of the "height of land," soon to be served by the Grand Trunk Pacific Railway, there is an immense area of excellent agricultural land, with an equable and temperate climate and an abundance of wood and water, which render the inducements it presents to those in search of homesteads as good as those offered anywhere else on the continent.

AGRICULTURAL LAND IN "NEW ONTARIO."

The great clay belt running from the Quebec boundary west through Nipissing and Algoma districts and into the district of Thunder Bay comprises an area of at least 24,500 square miles, or 15,680,000 acres, nearly all of which is well adapted for cultivation. This almost unbroken stretch of good farming land is larger than the States of Massachusetts, Connecticut, Rhode Island, New Jersey, and Delaware combined, and one-half the size of the State of New York. The region is watered by the Moose River, flowing into James Bay, and its tributaries, the Abitibi, Mattagami, and Missinabie, and by the Albany and its tributaries, the Kenogami and Ogoke. Each of these rivers is over 300 miles in length, and they range in width from 300 or 400 yards to a mile. They are fed by numerous smaller streams and these in turn drain numberless lakes of larger or smaller size, so that the whole country is one network of waterways. The great area of water surface also assures the country against the protracted drouths so often experienced in other countries.

In the small part of the district of Rainy River which was explored the proportion of good land is not so great, but the clay land in the townships around Dryden has an area of about 600 square miles, or 384,000 acres. There are also smaller cultivable areas at various other points.

CLIMATE IN NORTHERN ONTARIO.

The climate in this northern district presents no obstacles to successful agricultural settlement and is not much different from that of the Province of Manitoba, lying along the same parallel.

Schoolhouse and Farms, Morden, Manitoba.

RAINY RIVER DISTRICT.

Rainy River District is a lumbering, mining, and farming country. The valley of the Rainy River, with the country surrounding the Lake of the Woods, contains some areas of farming land which are unsurpassed in fertility of soil and general advantages. At the head of the Rainy River is the small town of Alberton, and down the river are several smaller villages where sawmills have been erected and where the settlers of the neighbourhood transact their business. Wabigoon, Rat Portage, and Keewatin are on the main line of the Canadian Pacific Railway, and from their end of the lake is a steamboat service across the lake and up the Rainy River to the falls at Fort Frances. Beyond these are other steamers for points in the interior. The Canadian Northern Railway crosses the Rainy River on its way to Manitoba, and forms another outlet for produce to the markets east and west.

GRANTS OF LAND.

The terms upon which land can be obtained from the Government in these localities vary according to locality. In general terms it may be said that they are liberal, but are intended for bona fide settlers only. Facilities, however, will be found by capitalists who desire to embark in commercial enterprises, for which there are many openings. Those desirous of more detailed information on the subject of "New Ontario" or of any particular section of it should write to the Crown Land Colonization Department, Toronto, Ontario, where all information concerning the subject can be obtained.

TIMBER AND WATER POWER.

This country is largely covered with extensive forests of spruce, jackpine, and poplar. The value of this class of timber is increasing every day, and the market for it is widening. In the district of Nipissing, north of the Canadian Pacific Railway line, there is estimated to be at least 20,000,000 cords of pulpwood; in the district of Algoma, 100,000,000 cords; in the district of Thunder Bay, 150,000,000 cords; and in the district of Rainy River, 18,000,000 cords; a grand total of 288,000,000 cords.

A feature of this region, important from an industrial point of view, is the existence of many falls on the rivers and streams. These will no doubt be utilized with advantage in the creation of economical power when the country comes to be opened up.

NIPISSING.

The Ottawa Valley having been for a number of years the pine-supplying region for the mills at the Chaudière Falls and other points on the river, several towns have grown up in the eastern portion of the district of Nipissing. Mattawa, on the line of the Canadian Pacific Railway, is the principal one, and there are other smaller settlements reached by railway and steamboat. There is a branch line to Timiskaming on the lake of that name, and in this neighbourhood a number of townships have been surveyed and are ready for settlement.

At North Bay on Lake Nipissing there is an important settlement. The railway and steamboat fare from Toronto to Nipissing is about $13, and from other places in proportion. Arrangements can be made with the railways for the carrying of settlers' effects by the carload.

ALGOMA DISTRICT.

In Algoma's wide expanse of territory there are varieties of soil and productive capabilities. There is plenty of good farming land, and that which is unsuitable for farming is, except in the immediate vicinity of the railway, usually covered with a thick growth of timber which is very useful to the settler.

There are a number of surveyed townships open to settlement near the Sault Ste. Marie — commonly called "The Soo" — and there are several settlements where persons with a little money can obtain an already cleared section or even a well cultivated farm. Algoma is served by the main line of the Canadian Pacific Railway and by the branch which runs from Sudbury to St. Paul, Minn., and through Dakota into the Canadian Northwest, as also by the lake steamers.

THUNDER BAY DISTRICT.

Fort William, at the mouth of the Kaministiquia River, is the summer lake terminus of the Canadian Pacific Railway. Here are three immense grain elevators through which pass the greater part of the exported wheat grown in Manitoba and Western Canada. Twenty miles up the river are the Kakabeka Falls, supplying a magnificent water power not yet in use. Up the banks of the river and in the neighbourhood there is a good deal of excellent farming land particularly suitable for mixed farming.

Port Arthur is the terminus of the Canadian Northern Railway, which runs through this and the Rainy River district and through Manitoba into the Northwest Territories, apparently intended to reach the Pacific Ocean.

The Thunder Bay & St. Joe Railway will run from Port Arthur north through a country of great wealth in timber and minerals as well as through sections affording good farming land.

RECORD SHOWING TIME OF BEGINNING WORK, HARVESTING, ACRES OF GRAIN, AND YIELD ON A. J. COTTON'S FARM AT TREHERNE AND SWAN RIVER VALLEY, MANITOBA.

The annexed table, showing acreage of wheat, average yield of all grain, date of sowing, harvesting, and length of season, will give the actual experience of one who came out to Manitoba with a moderate capital and started farming on a small scale. Any man willing and able to work can do the same.

As will be seen, the lowest average I had of wheat was in 1900, being 8¼ bushels per acre; a very dry season being the cause. I grew wheat which averaged as high as 55 bushels to the acre for 25 acres, but the following table shows the average for each year.

The first yield of barley was put in on spring breaking, and was a very good crop considering. The first spring I did not have my land ready for wheat, but have given the date my neighbour began to sow his wheat.

This is a true record I have kept, and shows how a settler with limited capital can begin farming on a small scale and increase his acreage. At the present time I have 27 head of horses — 20 of them working — 29 head of cattle, 15 ploughs, 8 waggons, 6 binders, 7 set of harrows, 4 seeders, and other implements to the value of $8,000 (all paid for), as well as 2,400 acres of land in the Swan River Valley, money out at interest on farm property, town property, &c., and a trifle in the bank, leaving us quite comfortable, happy, and contented with the country. I remain Yours truly,

Swan River, Manitoba, January 12th, 1904. (Signed), A. J. COTTON.

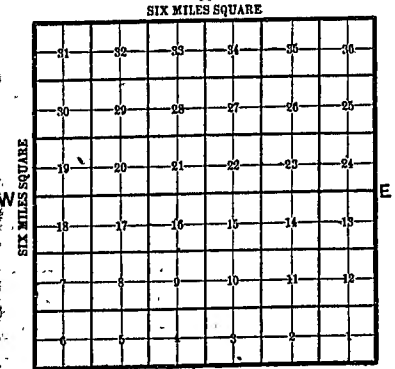
Began Farming in 1888.		No. of Bushels Threshed each Year.			Average per Acre.			DATES Began Sowing Wheat, &c., each Spring.				DATES Sowing, Harvesting, and Freezing			
Years	Acres in Wheat	Bushels Wheat	Bushels Oats	Bushels Barley	Wheat	Oats	Barley	Began to Harrow	Began to Sow Wheat	Began to Sow Oats	Began to Sow Barley	Finished Sowing Wheat	Began Cutting Wheat	Finished Cutting Wheat	Froze up
1888	-----	-----	25	356	-----	10	16	April 1	April 6	May 4	May 23	----------	----------	----------	Nov. 13
1889	62	1,371	-----	-----	23	----	-----	March 22	March 25	----------	----------	April 11	Aug. 8	Aug. 17	Nov. 21
1890	120	2,566	320	-----	31½	32	-----	April 2	April 7	April 30	----------	April 28	Aug. 20	Sept. 4	Nov. 5
1891	140	3 930	1.120	510	28	55	51	April 6	April 15	May 19	May 23	May 12	Aug. 19	Sept. 10	Nov. 18
1892	153	4,437	1,414	570	29	61½	57	April 13	April 18	May 24	May 21	May 16	Aug. 24	Sept. 5	Nov. 12
1893	200	4,378	1,000	428	22	40	43	May 1	May 2	May 24	May 31	May 19	Aug. 15	Aug. 30	Nov. 11
1894	280	8,400	2,140	460	30	61	38	April 25	April 26	May 22	May 29	May 16	Aug. 6	Aug. 23	Nov. 15
1895	314	12,745	4,032	800	40	76	57	April 1	April 8	April 29	May 10	April 24	Aug. 16	Aug. 31	Nov. 5
1896	320	4,536	2,930	542	14¼	36½	43	April 27	May 7	June 2	May 13	May 30	Aug. 22	Sept. 9	Nov. 1
1897	475	12,350	2 478	180	26	42	18	April 12	April 19	May 15	May 20	May 11	Aug. 16	Aug. 30	Nov 9
1898	515	16,026	7.788	585	31	59	45	April 8	April 13	May 18	May 13	May 3	Aug. 13	Aug. 29	Nov. 7
1899	650	18,022	3.741	-----	29	93	-----	April 12	April 24	May 25	----------	May 19	Aug. 17	Sept. 1	Nov 31
1900	730	6,205	2,800	-----	8½	35	-----	April 3	April 9	May 2	----------	May 1	Aug. 6	Sept. 3	Nov. 10
		Part of 1901 crop was raised in the Swan River Valley and all after 1901.													
1901	764	17,954	654	719	23½	28	34	April 1	April 8	May 16	June 21	May 10	Aug. 10	Aug. 29	Nov. 4
1902	175	4,550	5,063	495	26	61	45	April 14	April 15	May 19	June 10	May 14	Aug. 25	Sept. 6	Nov 9
1903	300	7,200	3.060	400	24	60	40	April 15	April 20	May 15	June 22	May 9	Aug. 29	Sept. 11	Nov 12

January 12th, 1904.—*The above is a correct statement of my operations. A. J. Cotton, Swan River, Manitoba.*

Fall of 1901 I removed to Swan River Valley.

Western Canada Homestead Regulations

THE FOLLOWING IS A PLAN OF A TOWNSHIP



Each square contains 640 acres; each quarter section contains 160 acres.

A section contains 640 acres and forms one mile square.

Government Lands open for homestead (that is for free settlement).—Section Nos 2, 4, 6, 10, 12, 14, 16, 18, 20, 22, 24, 28, 30, 32, 34, 36.

Canadian Pacific Railway Lands for sale.—Section Nos. 1, 3, 5, 7, 9, 13, 15, 17, 19, 21, 23, 25, 27, 31, 33, 35.

Section Nos. 1, 9, 13, 21, 25, 33, along the main line, Winnipeg, to Moose Jaw, can be purchased from Canada Northwest Land Company.

School Sections.—Section Nos. 11 and 29 are reserved by Government for school purposes.

Hudson's Bay Company's Land for sale.—Sections Nos. 8 and 26.

Any even-numbered section of Dominion lands in Manitoba or the Northwest Territories, excepting 8 and 26, which has not been homesteaded, reserved to provide wood lots for settlers, or for other purposes, may be homesteaded upon by any person who is the sole head of a family, or any male over eighteen years of age, to the extent of one quarter section of 160 acres, more or less.

ENTRY

Entry may be made personally at the local land office for the district in which the land to be taken is situate, or if the homesteader desires, he may, on application to the Minister of the Interior, Ottawa, the Commissioner of Immigration, Winnipeg, or the local agent for the district in which the land is situate, receive authority for some one to make entry for him. A fee of $10 is charged for an ordinary homestead entry.

HOMESTEAD DUTIES

Under the present law homestead duties must be performed in one of the following ways, namely:

(1) By at least six months residence upon and cultivation of the land in each year during the term of three years.

(2) If the father (or the mother, if the father is deceased) of any person who is eligible to make a homestead entry resides upon a farm in the vicinity of the land entered for by such person as a homestead, the requirements of the law as to residence prior to obtaining patent may be satisfied by such person residing with the father or mother.

(3) If the settler has his permanent residence upon farming land owned by him in the vicinity of his homestead, the requirements of the law as to residence may be satisfied by residence upon the said land.

APPLICATION FOR PATENT

Should be made at the end of the three years, before the Local Agent, Sub-Agent, or the Homestead Inspector. Before making application for patent the settler must give six months' notice in writing to the Commissioner of Dominion Lands at Ottawa of his intention to do so.

INFORMATION

Newly arrived immigrants will receive at the immigration office in Winnipeg or at any Dominion lands office in Manitoba or the Northwest Territories, information as to the lands that are open for entry, and from the officers in charge, free of expense, advice and assistance in securing lands to suit them; and full information respecting the land, timber, coal, and mineral laws, as well as respecting Dominion lands in the railway belt in British Columbia, may be obtained upon application to the Secretary of the Department of the Interior, Ottawa; the Commissioner of Immigration, Winnipeg, Manitoba, or to any of the Dominion lands agents in Manitoba or the Northwest Territories.

JAMES A. SMART,
Deputy Minister of the Interior.

N. B.—In addition to free grant lands, to which the regulations above stated refer, thousands of acres of most desirable lands are available for lease or purchase from railroad and other corporations and private firms in Western Canada.

CUSTOMS—FREE ENTRIES

The following is an extract from the customs tariff of Canada, specifying the articles that can be so entered:

Settlers' Effects, viz.: Wearing apparel, household furniture, books, implements and tools of trade, occupation, or employment; guns, musical instruments, domestic sewing machines, typewriters, live stock, bicycles, carts and other vehicles, and agricultural implements in use by the settler for at least six months before his removal to Canada; not to include machinery or articles imported for use in any manufacturing establishment or for sale; also books, pictures, family plate or furniture, personal effects, and heirlooms left by bequest; provided, that any dutiable articles entered as settlers' effects may not be so entered unless brought with the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty until after twelve months' actual use in Canada; provided also, that under regulations made by the Comptroller of Customs, live stock, when imported into Manitoba or the Northwest Territories by intending settler, shall be free until otherwise ordered by the Governor in Council.

Settlers arriving from the United States are allowed to enter duty free stock in the following proportions: One animal of neat stock or horses for each ten acres of land purchased or otherwise secured under homestead entry, up to 160 acres, and one sheep for each acre so secured. Customs duties paid on animals brought in excess of this proportion will be refunded for the number applicable to an additional holding of 160 acres, when taken up.

The settler will be required to fill up a form (which will be supplied him by the customs officer on application) giving description, value, etc., of the goods and articles he wishes to be allowed to bring in free of duty. He will also be required to take the following oath:

I, ... do hereby solemnly make oath and say, that all the goods and articles hereinbefore mentioned are, to the best of my knowledge and belief, entitled to free entry as settlers' effects, under the tariff of duties of customs now in force, and all of them have been owned and in actual use by myself for at least six months before removal to Canada; and that none of the goods or articles shown in this entry have been imported as merchandise or for any use in manufacturing establishment, or for sale, and that I intend becoming a permanent settler within the Dominion of Canada.

Sworn before me at ..... day of ..... 190..

The following oath shall be made by intending settlers when importing live stock into Manitoba or the Northwest Territories free of duty:

I, ..., do solemnly swear that I am now moving into Manitoba (or the Northwest Territories) with the intention of becoming a settler therein, and that the live stock enumerated and described in the entry hereunto attached is intended for my own use on the farm which I am about to occupy (or cultivate), and not for sale or speculative purposes, nor for the use of any other person or persons whomsoever.

QUARANTINE OF SETTLERS' CATTLE

Settlers' cattle, when accompanied by certificates of health, to be admitted without detention; when not so accompanied, they must be inspected. Inspectors may subject any cattle showing symptoms of tuberculosis to the tuberculin test before allowing them to enter. Any cattle found tuberculous to be returned to the United States or killed without indemnity. Sheep, for breeding and feeding purposes, may be admitted subject to inspection at port of entry, and must be accompanied by a certificate, signed by a Government inspector, that sheep scab has not existed in the district in which they have been fed for six months preceding the date of importation. If disease is discovered to exist in them, they may be returned or slaughtered. Swine may be admitted, when forming part of settlers' effects, when accompanied by a certificate that swine plague or hog cholera has not existed in the district whence they came for six months preceding the date of shipment; when not accompanied by such certificate, they must be subject to inspection at port of entry. If found diseased, to be slaughtered, without compensation.

FREIGHT REGULATIONS

A.—Carload of settlers' effects, within the meaning of this tariff, may be made up of the following described property for the benefit of actual settlers, viz.: Live stock, any number up to but not exceeding ten (10) head, all told, viz., horses, mules, cattle, calves, sheep, hogs; household goods and personal property (second-hand); wagons or other vehicles, for personal use (second-hand), farm machinery, implements, and tools (all second-hand); lumber and shingles, which must not exceed 2,500 feet in all, or the equivalent thereof; or in lieu of, not in addition the lumber and shingles a portable house may be shipped; seed grain; small quantity of trees or shrubbery; small lot live poultry or pet animals; and sufficient for the live stock while on the journey.

B.—Less than carloads will be understood to mean only household goods (second-hand); wagons or other vehicles, for personal use (second-hand); and second-hand farm machinery, implements, and tools. Less than carload lots should be plainly addressed.

C.—Merchandise, such as groceries, provisions, hardware, etc., also implements, machinery, vehicles, etc., if new, will not be regarded as settlers' effects, and if shipped will be charged the company's regular classified tariff rates.

D.—Should the allotted number of live stock be exceeded, the additional animals will be taken at the ordinary classified rates, over and above the carload rates for the settlers' effects, but the total charge for any one such car will not exceed the regular rate for a straight carload of live stock. (These ordinary tariff rates will be furnished by station agents on application.)

E.—Passes.—One man will be passed free in charge of live stock when forming parts of carloads, to feed, water, and care for them in transit. Agents will use the usual form of live-stock contract.

F.—Top Loads.—Settlers are not permitted, under any circumstances, to load any article on the top of box or stock cars; such manner of loading is dangerous, and is absolutely forbidden.

G.—Carloads will not be stopped at any point short of destination for the purpose of unloading part. The entire carload must go through to the station to which originally consigned.

H.—Carload Rates.—The rates shown in the column headed "Carloads" apply on any shipment occupying a car, and weighing 24,000 pounds (12 tons) or less. If the carloads weigh over 24,000 pounds, the additional weight will be charged for at proportionate rates. (Example: $6.65 "per car" is equivalent to 85¼ cents per hundred pounds, at which rate the additional weight would be charged.)

STOP-OVER PRIVILEGES

Intending settlers are given the privilege of stopping over at stations where they wish to inspect land. Application should be made to the conductor before reaching station where stop-over is required.

FUEL FOR SETTLERS

Any homesteader having no timber on his homestead may, on application to the Local Agent of Dominion Lands, get a permit to cut what he requires for building material, fencing, and fuel for use on his homestead.